

PIPELINE SCHEMATIC	HORIZONTAL STATIONS (2D)	PIPELINE DATA	STATIONS DESCRIPTION	SLOPE STATIONS (3D)	PIPELINE REPRESENTATION (3D)
HEAVY WALL PIPE	1560+00	MATCHLINE 1560+00			
WELD FITTING	1582+07 P.L. 0.052014 RT.				
TRANSITION PIECE	1582+26 P.L. 12.1446 RT.				
CASING PIPE	1582+26 P.L. 12.1446 RT.				
CONCRETE COATING					
SECTION WEIGHTS					
PIPELINE MARKING SIGN					
PIPELINE MARKER					
MATERIAL ITEM					
GROUNDING MAT					
ZINC RIBBON					
AERIAL MARKER					
CATHODIC TEST STATION					
MAINLINE VALVE					
CHECK VALVE					
OPEN VALVE					
BORE					
DRINKING WATER USA					
ECOLOGICAL USA					
HIGHLY POPULATED AREA					
OPERATOR (KEYSTONE)					
DEFINED					
OTHER POPULATED AREA					
SOURCE WATER PROTECTION AREA					
WELLHEAD PROTECTION AREA					
TEST SECTIONS (3D)					
TOPSOIL SALVAGE METHOD					
STREAMS					
WETLANDS					
TIMING CONSTRAINTS					
STATIONS					
MONITORING					
RECLAMATION					
SPECIAL CONSIDERATIONS					

- ### GENERAL NOTES
- ALL CHANGINGS ARE IN FEET UNLESS OTHERWISE SPECIFIED.
 - DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
 - FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
 - UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER EXCEPT 36 INCHES IN AREAS OF CONSOLIDATED ROCK.
 - NO ACTUAL AS-BUILT GROUND SHOTS WERE TAKEN AT THIS LOCATION. THE PROFILE REPRESENTS A PROJECTION FROM SHOTS TAKEN AT 150' TO 250' INTERVALS.
 - THE TYPE OF COATING APPLIED TO THE FIELD WELDS DURING THE ORIGINAL CONSTRUCTION WAS TWO COMPONENT LIQUID EPOXY. THE COATING PRODUCTS USED WERE DENSOL 7200 OR SPC SP-2888.
 - THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS AUGUST 11, 2009 FOR M.P. 0.30 TO M.P. 31.03 AND AUGUST 12, 2009 FOR M.P. 31.03 TO M.P. 66.93.
 - ORIGINAL IN-SERVICE DATE OF THE KEYSTONE PIPELINE (PHASE 1): JUNE 30, 2010.
 - CPS CALCULATION DATE: MAY 2010.
 - ORION STATION SERIES NUMBER: 1182700.
 - TO DETERMINE THE MILE POST AT A GIVEN LOCATION, ADD THE 3D STATION NUMBER FROM THIS SEGMENT TO THE STATION NUMBER 0+00 AND DIVIDE BY 5280.

OPERATING AND TEST PRESSURE

- THE MAXIMUM OPERATING PRESSURE (MOP) IS 1400 PSIG.
- THE MINIMUM TEST PRESSURE WAS 180 PSIG.

BILL OF MATERIALS (3D)

ITEM NO.	DESCRIPTION	QUANTITY
2	30" O.D. X 0.386" W.T. API 5LX-70 W/BFE COATING	12,735
3	30" O.D. X 0.516" W.T. API 5LX-70 W/BFE COATING & ABRASION RESISTANT OVERCOAT	287

ITEM	QUANTITY
PIPELINE MARKERS	1 EA
PIPELINE WARNING SIGNS	12 EA
CATHODIC TEST STATION	2 EA
AERIAL MARKER	1 EA

REFERENCE DRAWINGS

REF. NO.	DRAWING NO.	REV. NO.	DRAWING TITLE

REVISIONS

NO.	DATE	REV. BY	CHKD. BY	APP'D. BY	ENV. APP'D.	DESCRIPTION
1	5/17/08	UEI	RDG	LAC	SEC	ISSUED FOR CONSTRUCTION
2	5/27/08	UEI	GTC	LAC	SEC	ADDED CROSSING DETAILS
3	5/11/10	UEI				ISSUED FOR AS-BUILT

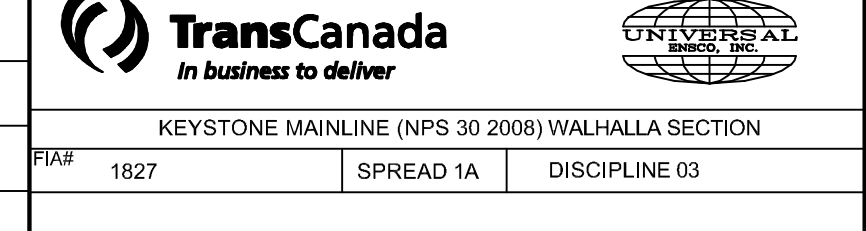
ENGINEERING RECORDS

DRAWN BY	INITIAL	DATE	ENV. APP'D.	INITIAL	DATE
UEI		09/12/21			

PROFESSIONAL ENGINEER

NAME	STATE	LIC#	REV#	DATE
LOYS A. GRAY, III	ND	PE5714		

SCALE: 0 125 250 500 Feet



KEYSTONE MAINLINE (NPS 30 2008) WALHALLA SECTION
 DRAWN 1827 SPREAD 1A DISCIPLINE 03
AS-BUILT ALIGNMENT
 M.P. 29.58 TO M.P. 32.05
 SHEET 13 OF 14 SHEETS
 STA. 1561+88 TO STA. 1692+04 (3D)
 DRAWING NO. 1827-03-ML-02-013 REV. 3

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