



GENERAL NOTES

- COVER NOT IN PARENTHESIS IS TO TOP OF KEYSTONE PIPELINE. COVER IN PARENTHESIS IS TO TOP OF FOREIGN PIPELINE OR UTILITY LINE.
- 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 DENSO 7200 OR SPC SP-2888.
- THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS OCTOBER 10, 2009 FOR M.P. 301.75 TO M.P. 343.98 AND OCTOBER 31, 2009 FOR M.P. 343.98 TO 377.31.
- 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 STATION NUMBER 1834-03-ML-02-012 AND DIVIDE BY 5280.

OPERATING AND TEST PRESSURE

- THE MAXIMUM OPERATING PRESSURE (MOP) IS 1440 PSIG.
- THE MINIMUM TEST PRESSURE WAS 160 PSIG.

BILL OF MATERIALS (3D)

ITEM NO.	DESCRIPTION	QUANTITY
2	30" O.D. X 0.386" W.T., API-5L-X70 W/FBE COATING	12,607'
3	30" O.D. X 0.516" W.T., API-5L-X70 W/FBE COATING & ABRASION RESISTANT OVERCOAT	401'
	PIPELINE MARKERS	0 EA
	PIPELINE WARNING SIGNS	5 EA
	CATHODIC TEST STATION	1 EA
	AERIAL MARKER	1 EA

REFERENCE DRAWINGS

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

REVISIONS

NO.	DATE	REV. BY	CHK. BY	APPR. BY	DESCRIPTION
1	5/17/08	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	10/17/09	UEI			ISSUED FOR AS-BUILT
					1834-03-ML-02-012
					REPLACES COVERAGE OF IFC DRAWINGS
					1834-03-ML-02-018
					1834-03-ML-02-019
					1834-03-ML-02-020

DISCLAIMER

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PIPELINE SCHEMATIC

- HEAVY WALL PIPE
- WELD FITTING
- TRANSITION PIECE
- CASING PIPE
- CONCRETE COATING
- SET-ON WEIGHTS
- PIPELINE WARNING SIGN
- PIPELINE MARKER
- MATERIAL ITEM

STATIONS (3D)

STATION	DESCRIPTION
1430+00	MATCHLINE 1430+00
1432+25	6.3' C.V.R.
1434+03	P.I. 00'00'12" RT.
1450+38	5.0' C.V.R.
1462+24	5.5' C.V.R.
1468+61	M.P. 339
1478+62	6.6' C.V.R.
1478+62	8.1' C.V.R.
1478+62	6.0' C.V.R.
1478+62	8.1' C.V.R.
1478+62	6.0' C.V.R.
1484+09	5.9' C.V.R.
1500+25	P.I. 00'00'12" RT.
1500+25	25' FBE & ARO
1503+45	58' FBE
1509+27	77' FBE & ARO BR.
1510+04	
1522+88	
1523+08	
1524+88	6.1' C.V.R.
1519+61	M.P. 340
1520+60	P.I. 00'12'23" RT.
1523+44	6.9' C.V.R.
1534+57	5.8' C.V.R.
1558+31	6.5' C.V.R.
1559+01	FENCE (BARBED WIRE)
1559+01	FENCE (BARBED WIRE)
1560+00	MATCHLINE 1560+00

TEST SECTIONS (3D)

TEST SECTION 3B-2
ILTO-02E-2010

ENVIRONMENTAL MITIGATION/RECLAMATION STATIONS (2D)

STATION	REPRESENTATION (2D)	REPRESENTATION (3D)
1477+86	②	4.494' FBE
1478+34	③	74' FBE & ARO
1479+28	①	
1479+59	②	
1485+27	③	
1486+01	②	
1500+25	③	
1503+45	②	
1509+27	③	
1510+04	②	
1522+88	②	
1523+08	②	
1524+88	②	
1519+61	②	
1520+60	②	
1523+44	②	
1534+57	②	
1558+31	②	
1559+01	②	
1560+00	②	

TEST SECTIONS (3D)

TOPSOIL SALVAGE METHOD

STREAMS

WETLANDS

TIMING CONSTRAINTS

STATIONS

MONITORING

RECLAMATION

SPECIAL CONSIDERATIONS

PROFESSIONAL ENGINEER

NAME	STATE	LIC#	REV#	DATE
LOYDS ALVIN GRAY, III	SD	CE9004		

SCALE: 0 125 250 500 Feet

TransCanada
In business to deliver

KEYSTONE MAINLINE (NPS 30 2009) CARPENTER SECTION

REV#	DATE	DESCRIPTION
1834		SPREAD 3B
		DISCIPLINE 03

AS-BUILT ALIGNMENT

M.P. 338.32 TO M.P. 340.78

SHEET 12 OF 20 SHEETS

STA. 1430+83 TO STA. 1560+91

DRAWING NO. 1834-03-ML-02-012

REV# 2