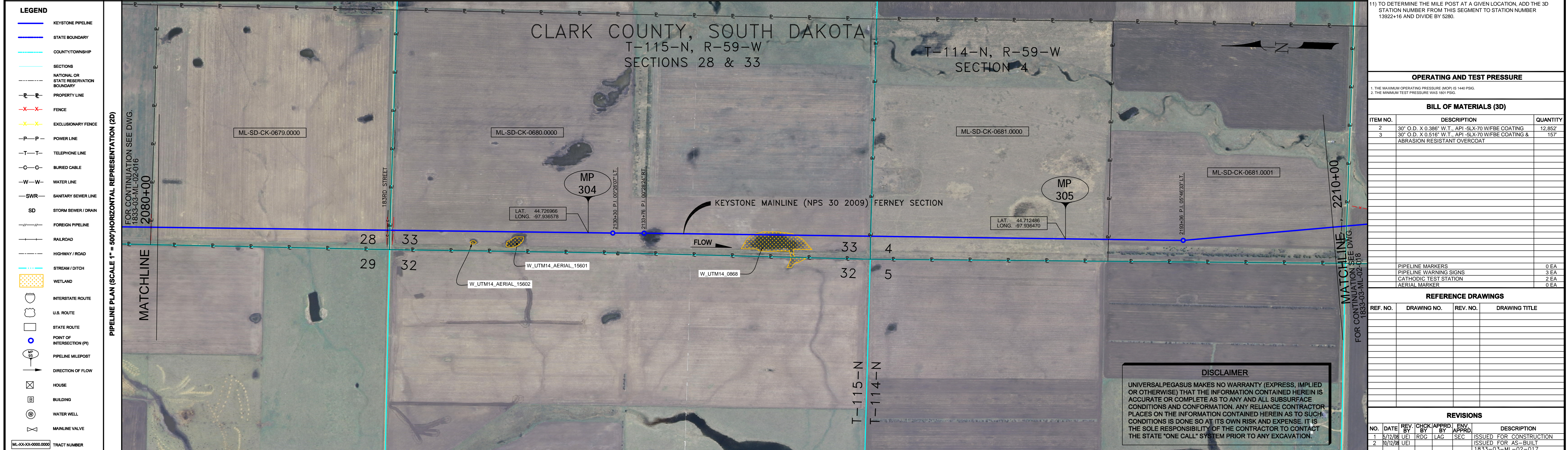


RIGHT-OF-WAY HORIZONTAL REPRESENTATION (2D) TRACT NUMBER OWNERSHIP/AGENCY LENGTH APPLICABLE DWG. NO. LAND USE	2080+00	ML-SD-CK-0679.0000	ML-SD-CK-0680.0000	ML-SD-CK-0681.0000	ML-SD-CK-0681.0001	2210+00
		1833-03-ML-02-016				
PIPELINE PROFILE HORIZ: 1"=500' VER: 1"=100' HORIZONTAL REPRESENTATION (2D)						
	<p>NATURAL GROUND</p> <p>TOP OF PIPE</p>					

- GENERAL NOTES**
- ALL CHAINAGES 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 DENSO 7200 OR SPC SP-2888.
  - THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS OCTOBER 08, 2009 FOR M.P. 259.21 TO M.P. 301.75 AND OCTOBER 10, 2009 FOR M.P. 301.75 TO M.P. 343.98.
  - 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 18322+16 AND DIVIDE BY 5280.



**LEGEND**

- KEYSTONE PIPELINE
- STATE BOUNDARY
- COUNTY/TOWNSHIP
- SECTIONS
- NATIONAL OR STATE RESERVATION BOUNDARY
- PROPERTY LINE
- FENCE
- EXCLUSIONARY FENCE
- POWER LINE
- TELEPHONE LINE
- BURIED CABLE
- WATER LINE
- SANITARY SEWER LINE
- SD STORM SEWER / DRAIN
- FOREIGN PIPELINE
- RAILROAD
- HIGHWAY / ROAD
- STREAM / DITCH
- WETLAND
- INTERSTATE ROUTE
- U.S. ROUTE
- STATE ROUTE
- POINT OF INTERSECTION (PI)
- PIPELINE MILEPOST
- DIRECTION OF FLOW
- HOUSE
- BUILDING
- WATER WELL
- MAINLINE VALVE

ML-SD-CK-0680.0000 TRACT NUMBER

**OPERATING AND TEST PRESSURE**

- THE MAXIMUM OPERATING PRESSURE (MOP) IS 1440 PSIG
- THE MINIMUM TEST PRESSURE WAS 1500 PSIG

**BILL OF MATERIALS (3D)**

ITEM NO.	DESCRIPTION	QUANTITY
2	30" O.D. X 0.388" W.T. API-5L X 70 W/FBE COATING	12,852
3	30" O.D. X 0.516" W.T. API-5L X 70 W/FBE COATING & ABRASION RESISTANT OVERCOAT	157
	PIPELINE MARKERS	0 EA
	PIPELINE WARNING SIGNS	3 EA
	CATHODIC TEST STATION	2 EA
	AERIAL MARKER	0 EA

**REFERENCE DRAWINGS**

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

**REVISIONS**

NO.	DATE	REV BY	CHK APPR BY	ENV APPR	DESCRIPTION
1	5/17/08	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	8/17/08	UEI			ISSUED FOR AS-BUILT
					1833-03-ML-02-017
					REPLACES COVERAGE OF IFC DRAWINGS
					1833-03-ML-02-026
					1833-03-ML-02-027
					1833-03-ML-02-028

**PIPELINE SCHEMATIC**

STATION	DESCRIPTION
2105+35	FENCE (BARBED WIRE)
2105+38	FIBER OPTIC CABLE
2105+47	EDGE OF ROAD
2105+46	CULVERT STREET
2105+49	FENCE (BARBED WIRE)
2105+47	FENCE (BARBED WIRE)
2106+77	FENCE (BARBED WIRE)
2106+80	FIBER OPTIC CABLE
2107+40	3.6' CL (3' ABOVE)
2107+48	CULVERT STREET
2107+49	FENCE (BARBED WIRE)
2107+49	FENCE (BARBED WIRE)
2107+49	7.1' C.V.R.
2116+53	6.1' C.V.R.
2129+04	M.P. 304
2130+50	P.I. 0072607' LT.
2133+76	P.I. 0072624' RT.
2146+46	6.8' C.V.R.
2159+88	FENCE (BARBED WIRE)
2160+26	FENCE (BARBED WIRE)
2160+45	
2161+64	M.P. 305
2183+36	P.I. 054633' LT.

**TEST SECTIONS (3D)**

TEST SECTION 3B-2  
ILTO-025-2010

**ENVIRONMENTAL MITIGATION/RECLAMATION STATIONS (2D)**

STATION	REPRESENTATION	DESCRIPTION
2105+39	②	2,530' FBE
2107+48	③	80' FBE & ARO BR.
2130+50	②	5,239' FBE
2160+45	③	77' FBE & ARO
2160+45	②	5,083' FBE

**TEST SECTIONS (3D)**

TOPSOIL SALVAGE METHOD

STREAMS

WETLANDS

TIMING CONSTRAINTS

**STATIONS**

MONITORING

RECLAMATION

SPECIAL CONSIDERATIONS

**ENGINEERING RECORDS**

DRAWN BY	INITIAL	DATE	ENV. APPR.	INITIAL	DATE
UEI		10/02/08			

**PROFESSIONAL ENGINEER**

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

**SCALE:** 0 125 250 500 Feet

**TransCanada**  
In business to deliver

KEYSTONE MAINLINE (NPS 30 2009) FERNEY SECTION

**AS-BUILT ALIGNMENT**

M.P. 303.10 TO M.P. 305.56  
SHEET 17 OF 20 SHEETS

STA. 2081+39 TO STA. 2211+48 (3D)  
1833-03-ML-02-017