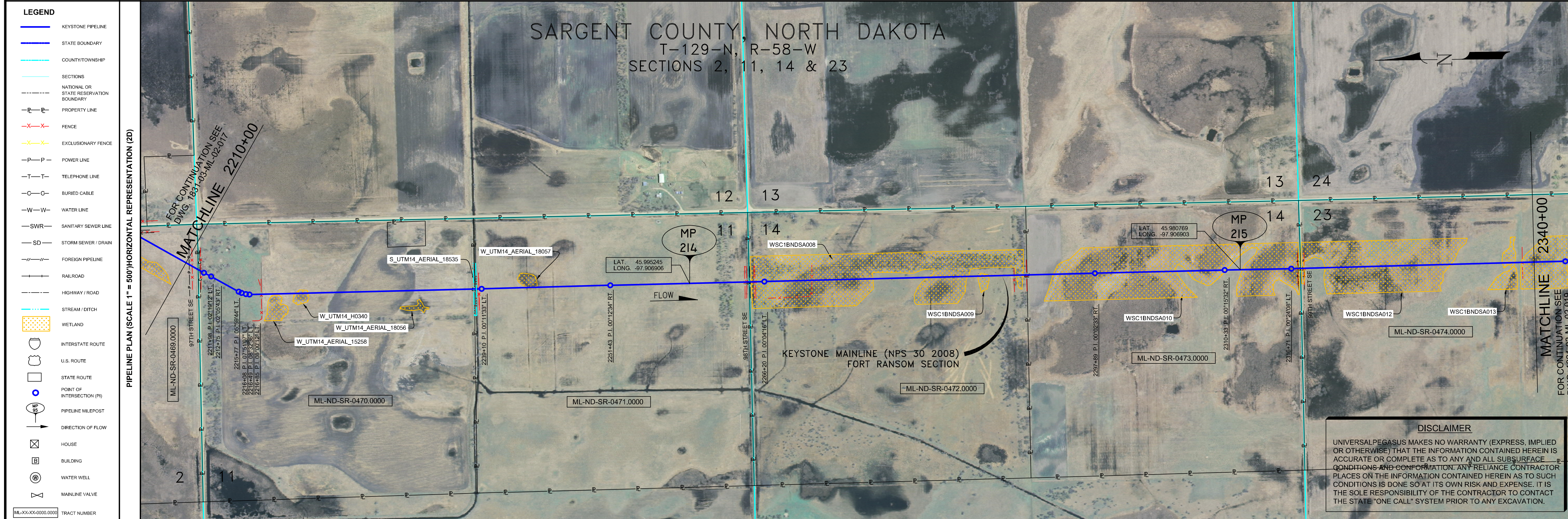


- GENERAL NOTES**
- 1) ALL CHAINAGES ARE IN FEET UNLESS OTHERWISE SPECIFIED.
 - 2) DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
 - 3) FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
 - 4) UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER EXCEPT 36 INCHES IN AREAS OF CONSOLIDATED ROCK.
 - 5) NO ACTUAL AS-BUILT GROUND SHOTS WERE TAKEN AT THIS LOCATION. THE PROFILE REPRESENTS A PROJECTION FROM SHOTS TAKEN AT 150' TO 250' INTERVALS.
 - 6) 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.
 - 7) THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS AUGUST 07, 2009 FOR M.P. 168.73 TO M.P. 195.68 AND SEPTEMBER 01, 2009 FOR M.P. 195.68 TO M.P. 218.50.
 - 8) ORIGINAL IN-SERVICE DATE OF THE KEYSTONE PIPELINE (PHASE 1): JUNE 30, 2010.
 - 9) CPS CALCULATION DATE: MAY 2010.
 - 10) ORION STATION SERIES NUMBER: 1162700.
 - 11) TO DETERMINE THE MILE POST AT A GIVEN LOCATION, ADD THE 3D STATION NUMBER FROM THIS SEGMENT TO STATION NUMBER 9038+16 AND DIVIDE BY 5280.



OPERATING AND TEST PRESSURE

1. THE MAXIMUM OPERATING PRESSURE (MOP) IS 1440 PSIG.
2. THE MINIMUM TEST PRESSURE WAS 1601 PSIG.

BILL OF MATERIALS (3D)

ITEM NO.	DESCRIPTION	QUANTITY
2	30" O.D. X 0.386" W.T., API 5LX-70 W/FB COATING	12,761'
3	30" O.D. X 0.516" W.T., API 5LX-70 W/FB COATING & ABRASION RESISTANT OVERCOAT	246'

REFERENCE DRAWINGS

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

REVISIONS

NO.	DATE	REV. BY	CHECKED BY	APPROVED BY	DESCRIPTION
1	5/17/08	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	8/17/08	UEI	RDG	LAG	ADDED CROSSING DETAILS (ISSUED FOR AS-BUILT)
3	10/20/08	UEI	RDG	LAG	REPLACES COVERAGE OF 1831-03-MI-02-018 IFC DRAWINGS
					1831-03-MI-02-028
					1831-03-MI-02-029
					1831-03-MI-02-030

PIPELINE SCHEMATIC

STATION	DESCRIPTION
2210+00	MATCHLINE 2210+00 UNDERGROUND POWERLINE
2210+36	3" V.C. (ABOVE)
2210+48	FENCE (WOOD WIRE)
2211+19	EDGE OF ROAD
2211+48	EDGE OF ROAD
2211+54	FIBER OPTIC CABLE
2211+65	FENCE (BARBED WIRE)
2211+88	POWERLINE
2222+25	P.I. 02/05/33 RT.
2230+77	P.I. 03/30/44 RT.
2231+70	P.I. 03/30/44 RT.
2231+78	P.I. 03/30/44 RT.
2231+85	P.I. 03/30/44 RT.
2231+91	P.I. 03/30/44 RT.
2231+97	P.I. 03/30/44 RT.
2231+99	TOP BANK
2232+02	CL DITCH
2232+10	TOP BANK
2233+38	P.I. 00/12/34 RT.
2233+41	6.2' C.V.R.
2261+04	M.P. 214
2261+38	4.2' C.V.R.
2261+42	6.5' C.V.R.
2261+48	FENCE (WOOD WIRE)
2261+51	FENCE (WOOD WIRE)
2261+54	EDGE OF ROAD
2261+58	CL 98TH STREET SE
2261+74	EDGE OF ROAD
2261+80	CL 98TH STREET SE
2261+81	EDGE OF ROAD
2261+87	EDGE OF ROAD
2261+91	FENCE (WOOD WIRE)
2261+95	FENCE (WOOD WIRE)
2261+97	P.I. 00/04/16 RT.
2261+99	6.9' C.V.R.
2270+70	BEGIN SLOUGH
2272+72	FENCE (BARBED WIRE)
2274+41	CL SLOUGH
2276+71	END SLOUGH
2283+17	4.7' C.V.R.
2284+04	BEGIN SLOUGH
2287+06	CL SLOUGH
2289+88	END SLOUGH
2292+14	FENCE (HOG WIRE)
2293+31	FENCE (BARBED WIRE)
2296+30	BEGIN SLOUGH
2297+48	P.I. 00/02/33 RT.
2298+48	CL SLOUGH
2306+22	END SLOUGH
2309+08	BEGIN SLOUGH
2310+73	CL SLOUGH
2312+40	END SLOUGH
2313+54	M.P. 215
2314+36	BEGIN SLOUGH
2317+90	END SLOUGH
2318+70	P.I. 00/24/38 RT.
2318+75	POWERLINE AND 7.0' CLT. (ABOVE)
2319+32	FENCE (BARBED WIRE)
2319+37	UNDERGROUND POWERLINE
2319+48	EDGE OF ROAD
2319+69	EDGE OF ROAD
2319+92	POWERLINE, HT. = 27'
2319+96	FENCE (BARBED WIRE)
2320+19	6.7' C.V.R.
2322+07	BEGIN SLOUGH
2327+86	CL SLOUGH
2334+25	END SLOUGH
2338+09	BEGIN SLOUGH
2338+25	END SLOUGH
2338+29	END SLOUGH
2338+67	FENCE (BARBED WIRE)
2342+00	MATCHLINE 2342+00

ENGINEERING RECORDS

DRAWN BY	INITIAL	DATE	ENY APPRD.	INITIAL	DATE
UEI		10/01/25			

PROFESSIONAL ENGINEER

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

TEST SECTIONS (3D)

TEST SECTION 2A-3
ILTO-023-2010

ENVIRONMENTAL MITIGATION/RECLAMATION STATIONS (2D)

STATION	DESCRIPTION
2240+24	
2240+42	
2240+75	
2241+90	
2242+04	
2242+10	
2242+25	
2242+30	
2242+35	
2242+40	
2242+45	
2242+50	
2242+55	
2242+60	
2242+65	
2242+70	
2242+75	
2242+80	
2242+85	
2242+90	
2242+95	
2243+00	
2243+05	
2243+10	
2243+15	
2243+20	
2243+25	
2243+30	
2243+35	
2243+40	
2243+45	
2243+50	
2243+55	
2243+60	
2243+65	
2243+70	
2243+75	
2243+80	
2243+85	
2243+90	
2243+95	
2244+00	

SCALE: 0 125 250 500 Feet

TransCanada
In business to deliver

KEYSTONE MAINLINE (NPS 30 2008) FORT RANSOM SECTION

AS-BUILT ALIGNMENT

M.P. 213.07 TO M.P. 215.53
SHEET 18 OF 19 SHEETS

STA. 2211+93 TO STA. 2342+00 (3D)

DRAWING NO. 1831-03-ML-02-018 REV. 3

Z:\00_KEYSTONE_AS_BUILT\T4-alignment sheets for North Dakota\ND1831-018.dwg, 3/10/2011 7:54:23 AM, pdfFactory.pd