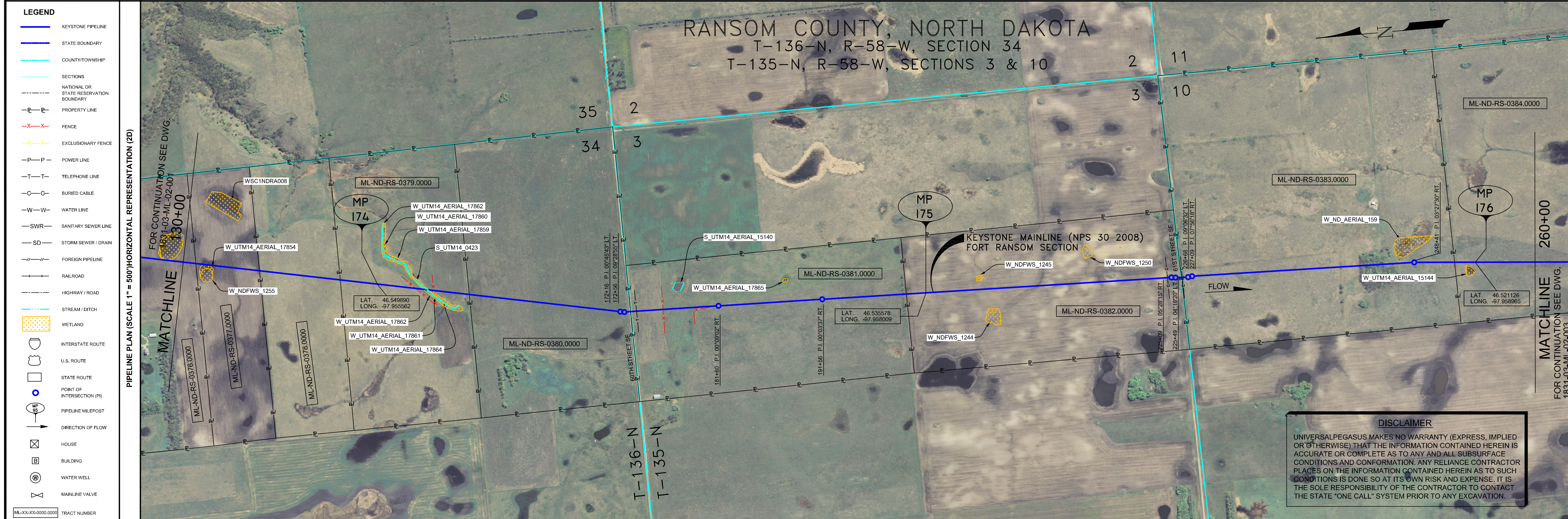


RIGHT-OF-WAY HORIZONTAL REPRESENTATION (2D)	TRACT NUMBER	LENGTH APPLICABLE DWG. NO.	LAND USE
130+00	ML-ND-RS-0376.0000		
131+25	ML-ND-RS-0377.0000		
137+39	ML-ND-RS-0378.0000		
145+17	ML-ND-RS-0379.0000		
157+42	ML-ND-RS-0380.0000		
173+00	ML-ND-RS-0380.0000	173+15	
198+85	ML-ND-RS-0381.0000		
201+00	ML-ND-RS-0382.0000		
226+04	ML-ND-RS-0383.0000		
252+29	ML-ND-RS-0384.0000		
260+00			

- 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 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. 216.50.
 - 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 9038+16 AND DIVIDE BY 5280.



OPERATING AND TEST PRESSURE

- THE MAXIMUM OPERATING PRESSURE (MOP) IS 1440 PSIG.
- 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 WFBE COATING	12,853'
3	30" O.D. X 0.516 W.T. API-5LX-70 WFBE COATING & ABRASION RESISTANT OVERCOAT	159'
	PIPELINE MARKERS	0 EA
	PIPELINE WARNING SIGNS	4 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. BY	APP. BY	ENV. APP. BY	DESCRIPTION
1	5/17/08	UEI	RDG	LAC	SEC	ISSUED FOR CONSTRUCTION
2	10/17/09	UEI				ISSUED FOR AS-BUILT
						1831-03-MI-02-002
						REPLACES COVERAGE OF IFC DRAWINGS
						1831-03-MI-02-002
						1831-03-MI-02-003
						1831-03-MI-02-004

PIPELINE SCHEMATIC

STATION	DESCRIPTION	STATION	DESCRIPTION
130+00	MATCHLINE	260+00	MATCHLINE
131+83	BEGIN SLOUGH	224+00	FIBER OPTIC CABLE
132+33	CL SLOUGH	224+09	4.2' C/R (ABOVE)
133+14	END SLOUGH	224+15	4.2' C/R (ABOVE)
148+04	M.P. 174	224+28	4.2' C/R (ABOVE)
152+73	FENCE (BARBED WIRE)	224+31	EDGE OF ROAD
152+79	CL SLOUGH	224+41	EDGE OF ROAD
153+39	CL SLOUGH	224+47	EDGE OF ROAD
154+48	FENCE (BARBED WIRE)	224+54	EDGE OF ROAD
154+60	7/8" C/R	224+57	EDGE OF ROAD
159+36	5.1' C/R	224+58	EDGE OF ROAD
173+00	MATCHLINE	224+71	FIBER OPTIC CABLE
173+04	EDGE OF ROAD	224+79	4.2' C/R (ABOVE)
173+44	CL 60TH STREET SE	224+81	4.2' C/R (ABOVE)
173+54	EDGE OF ROAD	224+82	4.2' C/R (ABOVE)
174+01	TELEPHONE LINE	224+83	4.2' C/R (ABOVE)
174+08	FENCE (BARBED WIRE)	224+84	EDGE OF ROAD
174+18	FENCE (BARBED WIRE)	224+87	EDGE OF ROAD
181+50	P.I. 00709292 RT.	224+88	EDGE OF ROAD
183+86	5.4' C/R	224+94	EDGE OF ROAD
188+21	5.2' C/R	224+97	EDGE OF ROAD
188+56	4.2' C/R	224+98	EDGE OF ROAD
190+76	5.2' C/R	224+99	EDGE OF ROAD
191+87	P.I. 00703377 RT.	224+99	EDGE OF ROAD
193+00	4.4' C/R	224+99	EDGE OF ROAD
201+84	M.P. 175	224+99	EDGE OF ROAD
226+00	MATCHLINE	226+00	MATCHLINE
226+02	FIBER OPTIC CABLE	226+03	EDGE OF ROAD
226+03	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+04	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+05	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+06	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+07	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+08	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+09	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+10	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+11	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+12	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+13	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+14	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+15	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+16	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+17	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+18	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+19	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+20	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+21	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+22	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+23	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+24	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+25	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+26	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+27	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+28	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+29	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+30	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+31	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+32	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+33	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+34	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+35	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+36	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+37	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+38	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+39	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+40	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+41	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+42	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+43	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+44	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+45	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+46	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+47	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+48	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+49	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+50	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+51	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+52	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+53	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+54	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+55	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+56	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+57	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+58	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+59	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+60	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+61	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+62	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+63	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+64	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+65	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+66	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+67	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+68	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+69	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+70	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+71	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+72	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+73	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+74	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+75	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+76	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+77	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+78	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+79	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+80	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+81	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+82	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+83	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+84	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+85	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+86	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+87	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+88	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+89	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+90	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+91	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+92	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+93	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+94	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+95	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+96	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+97	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+98	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
226+99	4.2' C/R (ABOVE)	226+04	EDGE OF ROAD
227+00	MATCHLINE	227+00	MATCHLINE

ENGINEERING RECORDS

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

PROFESSIONAL ENGINEER

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

TEST SECTIONS (3D)

TEST SECTION	DESCRIPTION
TEST SECTION 2A-2	ILTO-022-2010

ENVIRONMENTAL MITIGATION/RECLAMATION STATIONS (2D)

STATION	DESCRIPTION
TOPSOIL SALVAGE METHOD	
STREAMS	
WETLANDS	
TIMING CONSTRAINTS	
MONITORING	
RECLAMATION	
SPECIAL CONSIDERATIONS	

SCALE: 0 125 250 500 Feet

TransCanada
In business to deliver

KEYSTONE MAINLINE (NPS 30 2008) FORT RANSOM SECTION

F#	SPREAD 2A	DISCIPLINE 03
1831		

AS-BUILT ALIGNMENT
M.P. 173.64 TO M.P. 176.11
SHEET 2 OF 19 SHEETS
STA. 130+22 TO STA. 260+34 (3D)
DRAWING NO. 1831-03-ML-02-002 REV. 2

Z:\00_KEYSTONE_AS_BUILT\T4-alignment sheets for North Dakota\ND1831_02.dwg, 3/10/2011 6:54:58 AM, pdfFactory.pd