



- 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 16, 2009 FOR M.P. 66.90 TO M.P. 88.54, SEPTEMBER 16, 2009 FOR M.P. 88.54 TO M.P. 114.00 AND SEPTEMBER 23, 2009 FOR M.P. 114.00 TO M.P. 130.00.
  - 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: 1182700.
  - 11) TO DETERMINE THE MILE POST AT A GIVEN LOCATION, ADD THE 3D STATION NUMBER FROM THIS SEGMENT TO STATION NUMBER 4028+46 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 0.388" W.T. API-5L-X70 WFBE COATING	12,577'
3	30" O.D. X 0.516" W.T. API-5L-X70 WFBE COATING & ABRASION RESISTANT OVERCOAT	433'

  

DESCRIPTION	QUANTITY
PIPELINE MARKERS	2 EA
PIPELINE WARNING SIGNS	8 EA
CATHODIC TEST STATION	3 EA
AERIAL REFERENCE	1 EA

**REFERENCE DRAWINGS**

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

**REVISIONS**

NO.	DATE	REV. BY	CHECKED BY	APPROVED BY	DESCRIPTION
1	5/17/09	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	8/11/09	UEI	RDG	LAG	ISSUED FOR AS-BUILT 1829-03-ML-02-006 REPLACES COVERAGE OF IFC DRAWINGS 1829-03-ML-02-008, 1829-03-ML-02-010

PIPELINE SCHEMATIC	STATION DESCRIPTION	STATION	STATION
HEAVY WALL PIPE	MATCHLINE 650+00	650+00	650+00
WELD FITTING	651+68 P.I. 01109111 RT.	651+68	651+68
TRANSITION PIECE	653+41 P.I. 12102222 RT.	653+41	653+41
CASING PIPE	653+41 P.I. 10146244 RT.	653+41	653+41
CONCRETE COATING	661+18 P.I. 02159456 LT.	661+18	661+18
SET-ON WELDS	662+50 P.I. 02159456 LT.	662+50	662+50
PIPELINE WARNING SIGN	663+43 P.I. 00112001 LT.	663+43	663+43
PIPELINE MARKER	664+43 P.I. 00126356 LT.	664+43	664+43
MATERIAL ITEM	665+43 P.I. 00126356 LT.	665+43	665+43
GROUNDING MAT	665+43 P.I. 00126356 LT.	665+43	665+43
ZINC RIBBON	665+43 P.I. 00126356 LT.	665+43	665+43
AERIAL MARKER	665+43 P.I. 00126356 LT.	665+43	665+43
CATHODIC TEST STATION	665+43 P.I. 00126356 LT.	665+43	665+43
MAINLINE VALVE	665+43 P.I. 00126356 LT.	665+43	665+43
CHECK VALVE	665+43 P.I. 00126356 LT.	665+43	665+43
OPEN CUT	665+43 P.I. 00126356 LT.	665+43	665+43
BORER	665+43 P.I. 00126356 LT.	665+43	665+43
DRINKING WATER USA	665+43 P.I. 00126356 LT.	665+43	665+43
ECOLOGICAL USA	665+43 P.I. 00126356 LT.	665+43	665+43
HIGHLY POPULATED AREA	665+43 P.I. 00126356 LT.	665+43	665+43
OPERATOR (KEYSTONE) DEFINED	665+43 P.I. 00126356 LT.	665+43	665+43
OTHER POPULATED AREA	665+43 P.I. 00126356 LT.	665+43	665+43
SOURCE WATER PROTECTION AREA	665+43 P.I. 00126356 LT.	665+43	665+43
WELLHEAD PROTECTION AREA	665+43 P.I. 00126356 LT.	665+43	665+43
CPS (3D)	667+42 TELEPHONE LINE	667+42	667+42
7.0' CVR	668+48 P.I. 12153500 LT.	668+48	668+48
6.0' CVR	669+12 P.I. 11132400 LT.	669+12	669+12
5.234' FBE	670+43 P.I. 00117416 LT.	670+43	670+43
5.234' FBE	671+42	671+42	671+42
5.234' FBE	672+42	672+42	672+42
5.234' FBE	673+42	673+42	673+42
5.234' FBE	674+42	674+42	674+42
5.234' FBE	675+42	675+42	675+42
5.234' FBE	676+42	676+42	676+42
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5.234' FBE	725+42	725+42	725+42
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5.234' FBE	727+42	727+42	727+42
5.234' FBE	728+42	728+42	728+42
5.234' FBE	729+42	729+42	729+42
5.234' FBE	730+42	730+42	730+42
5.234' FBE	731+42	731+42	731+42
5.234' FBE	732+42	732+42	732+42
5.234' FBE	733+42	733+42	733+42
5.234' FBE	734+42	734+42	734+42
5.234' FBE	735+42	735+42	735+42
5.234' FBE	736+42	736+42	736+42
5.234' FBE	737+42	737+42	737+42
5.234' FBE	738+42	738+42	738+42
5.234' FBE	739+42	739+42	739+42
5.234' FBE	740+42	740+42	740+42
5.234' FBE	741+42	741+42	741+42
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5.234' FBE	750+42	750+42	750+42
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5.234' FBE	757+42	757+42	757+42
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5.234' FBE	761+42	761+42	761+42
5.234' FBE	762+42	762+42	762+42
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5.234' FBE	764+42	764+42	764+42
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5.234' FBE	766+42	766+42	766+42
5.234' FBE	767+42	767+42	767+42
5.234' FBE	768+42	768+42	768+42
5.234' FBE	769+42	769+42	769+42
5.234' FBE	770+42	770+42	770+42
5.234' FBE	771+42	771+42	771+42
5.234' FBE	772+42	772+42	772+42
5.234' FBE	773+42	773+42	773+42
5.234' FBE	774+42	774+42	774+42
5.234' FBE	775+42	775+42	775+42
5.234' FBE	776+42	776+42	776+42
5.234' FBE	777+42	777+42	777+42
5.234' FBE	778+42	778+42	778+42
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5.234' FBE	788+42	788+42	788+42
5.234' FBE	789+42	789+42	789+42
5.234' FBE	790+42	790+42	790+42
5.234' FBE	791+42	791+42	791+42
5.234' FBE	792+42	792+42	792+42
5.234' FBE	793+42	793+42	793+42
5.234' FBE	794+42	794+42	794+42
5.234' FBE	795+42	795+42	795+42
5.234' FBE	796+42	796+42	796+42
5.234' FBE	797+42	797+42	797+42
5.234' FBE	798+42	798+42	798+42
5.234' FBE	799+42	799+42	799+42
5.234' FBE	800+42	800+42	800+42
5.234' FBE	801+42	801+42	801+42
5.234' FBE	802+42	802+42	802+42
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5.234' FBE	809+42	809+42	809+42
5.234' FBE	810+42	810+42	810+42
5.234' FBE	811+42	811+42	811+42
5.234' FBE	812+42	812+42	812+42
5.234' FBE	813+42	813+42	813+42
5.234' FBE	814+42	814+42	814+42
5.234' FBE	815+42	815+42	815+42
5.234' FBE	816+42	816+42	816+42
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5.234' FBE	818+42	818+42	818+42
5.234' FBE	819+42	819+42	819+42</