

TransCanada Pipelines
Title: Rectifier and Groundbed Measurements
Date: Tuesday, March 27, 2012

Operational Region: **Western States Region**
 Area of Influence: **North Pipeline**

Start Date: **2007-01-01**
 End Date: **2012-03-27**

5005104+105.7-R

Enclosure Name	Reading Type	Rectifier Number	Tap Setting	Rectifier Reading (Vol)	Rectifier Type	Groundbed Name	Groundbed Reading (amps)	Groundbed Type	Groundbed Circuit Resistance (ohm)	Reading Date	Source	Groundbed Comment	Rectifier Comment
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.5000	Normal	8.67	10-Jan-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.7000	Normal	7.65	05-Feb-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	12.5000	Normal	Beck Road	1.6000	Normal	7.81	14-Feb-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.6000	Normal	8.13	05-Mar-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.8000	Normal	8.13	11-Apr-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.5000	Normal	Beck Road	1.7000	Normal	7.94	03-May-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	14.0000	Normal	Beck Road	1.7000	Normal	8.24	08-Jun-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	14.0000	Normal	Beck Road	1.7000	Normal	8.24	03-Jul-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	14.0000	Normal	Beck Road	1.5000	Normal	9.33	09-Aug-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.5000	Normal	Beck Road	1.5000	Normal	9.00	04-Sep-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.5000	Normal	Beck Road	1.7000	Normal	7.94	02-Oct-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.5000	Normal	Beck Road	1.8000	Normal	7.50	06-Nov-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	14.0000	Normal	Beck Road	1.8000	Normal	7.78	07-Dec-2007 00:00	Manual	unknown		
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.8000	Normal	7.22	08-Jan-2008 00:00	Manual	unknown		
Rectifier	105.7	A5	12.5000	Normal	Beck Road	1.5000	Normal	7.81	14-Feb-2008 00:00	Manual	unknown		
Rectifier	105.7	A5	12.5000	Normal	Beck Road	1.8000	Normal	8.91	05-Mar-2008 00:00	Manual	unknown		
Rectifier	105.7	A5	13.0000	Normal	Beck Road	1.5000	Normal	8.67	01-Apr-2008 00:00	Manual	unknown		
Rectifier	105.7	A3	14.0000	Normal	Beck Road	1.7000	Normal	8.24	12-Jun-2008 00:00	Manual	unknown		
Rectifier	105.7	A3	14.0000	Normal	Beck Road	1.6000	Normal	8.75	02-Jul-2008 00:00	Manual	unknown		
Rectifier	105.7	A3	13.4000	Normal	Beck Road	1.1000	Normal	12.18	02-Sep-2008 00:00	Manual	unknown		
Rectifier	105.7	A3	13.4000	Normal	Beck Road	2.0000	Normal	6.50	10-Nov-2008 00:00	Manual	unknown		
Rectifier	105.7	A3	13.0000	Normal	Beck Road	1.5000	Normal	8.67	12-Jan-2009 00:00	Manual	unknown		
Rectifier	105.7	A3	13.0000	Normal	Beck Road	1.5000	Normal	8.02	05-May-2009 00:00	Manual	unknown		
Rectifier	105.7	A3	13.4000	Normal	Beck Road	1.6800	Normal	7.98	09-Jul-2009 00:00	Manual	unknown		
Rectifier	105.7	A3	13.0000	Normal	Beck Road	1.9000	Normal	6.94	10-Sep-2009 00:00	Manual	unknown		
Rectifier	105.7	A3	13.0000	Normal	Beck Road	1.5000	Normal	8.67	10-Nov-2009 00:00	Manual	unknown		
Rectifier	105.7	A3	13.3000	Normal	Beck Road	1.5000	Normal	8.87	11-Jan-2010 00:00	Manual	unknown		
Rectifier	105.7	A3	13.4000	Normal	Beck Road	1.7000	Normal	7.88	09-Mar-2010 00:00	Manual	By Dean Christman	By Dean Christman	
Rectifier	105.7	A3	13.8000	Normal	Beck Road	1.7000	Normal	8.00	10-May-2010 00:00	Manual	By Tab Anderson	By Tab Anderson	
Rectifier	105.7	A3	13.9100	Normal	Beck Road	1.7700	Normal	7.86	07-Jul-2010 00:00	Manual	By Rich Christman	By Rich Christman	



Exhibit B

Rectifier	105.7	A3	14.1000	Normal	Beck Road	1.8000	Normal	7.83	14-Sep-2010 00:00	Manual	
Rectifier	105.7	A3	0.0000	Normal	Beck Road	0.0000	Normal	N/A	02-Nov-2010 00:00	Manual	Off for pipe replacement project
Rectifier	105.7	A3	13.8000	Normal	Beck Road	1.7100	Normal	8.07	06-Jan-2011 00:00	Manual	and Depot work Williams Pl. & Beck work W Williams Pl. &
Rectifier	105.7	A3	13.7400	Normal	Beck Road	1.9800	Normal	6.84	01-Mar-2011 00:00	Manual	
Rectifier	105.7	A3	13.6000	Normal	Beck Road	1.7200	Normal	7.91	05-May-2011 00:00	Manual	
Rectifier	105.7	A3	0.0000	Normal	Beck Road	0.0000	Normal	N/A	08-Jul-2011 00:00	Manual	OFF for Depot Work
Rectifier	105.7	A4	18.3000	Normal	Beck Road	2.3600	Normal	7.75	06-Sep-2011 00:00	Manual	OFF for Depot Work
Rectifier	105.7	A4	0.0000	Normal	Beck Road	0.0000	Normal	N/A	01-Nov-2011 00:00	Manual	Off for Williams pipeline work
Rectifier	105.7	A5	23.2000	Normal	Beck Road	2.5500	Normal	9.10	05-Jan-2012 00:00	Manual	By Dean Christman
Rectifier	105.7	A5	23.2000	Normal	Beck Road	3.3000	Normal	7.03	01-Mar-2012 00:00	Manual	By Tad Anderson