



1700 Broadway, Suite 2300, Denver, CO 80290-2300
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June 23, 2015
Belfield Oil PHMSA Inspection Response

PHMSA Pipeline Safety
Attention Mr. Allan C. Beshore
Director, Central Region, OPS
Pipeline and Hazardous Materials Safety Administration
901 Locust St., Suite 462
Kansas City, MO 64106-2641

JUN 23 2015

Reference: CPF 3-2015-5004 – Response to Proposed Compliance Order

Dear Mr. Beshore,

This letter is intended to notify you that Whiting Petroleum and Gas Corporation is not contesting the proposed compliance order and the alleged violations associated with it and have completed actions in the proposed compliance order received on June 4, 2015.

In the Notice of Probable Violation and Proposed Compliance Order, item 5, 195.563 - Which pipelines must have cathodic protection? Each buried or submerged pipeline that is constructed, relocated, replaced, or otherwise changed after the applicable date in Sec. 195.401(c) must have cathodic protection. The cathodic protection must be in operation not later than 1 year after the pipeline is constructed, relocated, replaced, or otherwise changed, as applicable.

Whiting did not apply cathodic protection to the breakout tanks located in Skunk Hill station. Whiting thought that the tanks did not require cathodic protection because the tanks were under 500 barrels, per 195.565. However, 195.565 addressed the use of API 651 for installation of cathodic protection. It does not state that tanks under 500 barrels do not require cathodic protection. Another regulation, 195.563(a), requires pipelines to have cathodic protection within one year. Breakout tanks are part of the pipeline system per the definition on 195.2.

In response:

On Monday, June 8, 2015, the cathodic protection work on the 8 breakout tanks at the Skunk Hill tank battery commenced by CP Masters Inc. In total, 40 anodes were installed, five under each of the eight tanks. The anodes were driven in between the secondary containment barrier and the bottom of the tanks at roughly 72 degree increments. Prior to the attachment of the anodes a native survey of the tanks was



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completed. In sum, 32 potential measurements were taken, four on each tank at the cardinal directions. The anodes were then attached directly to the tank by means of "pin Brazing". Once the anodes were attached a second "on potential" survey was conducted at the same test points to ensure the galvanic anode system was functioning as designed. Upon completion of the installation all excess material and waste was removed and the gravel around the 8 breakout tanks was raked and returned to the state it was in when the project began. The project is now complete.

PICTURES:

Anodes Prior To Installation





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Anodes as laid out under the tanks





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Anode partially installed under tank





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Anode fully installed under tank





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Attachment point brazed to tank





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Anode installation completed



SURVEY DATA:

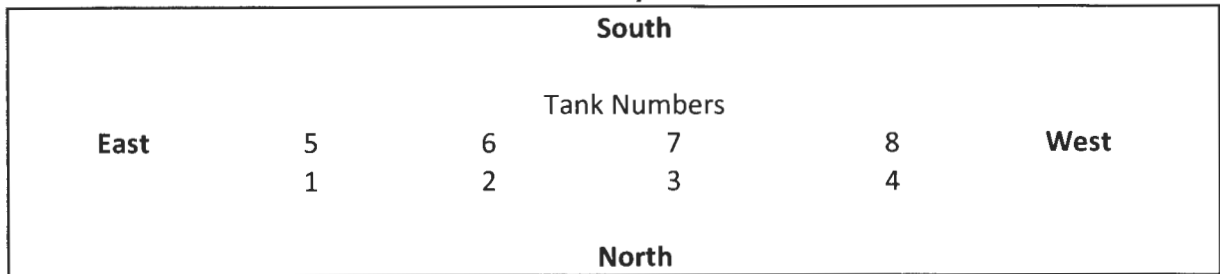
All Potentials were measured with a Fluke 177 high impedance multi-meter and a Cu/CuSO₄ Reference cell. The temperature at the time of the survey was 80 degrees Fahrenheit and the soil conditions were moist as it had rained two nights prior.



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Skunk Hill Tank Potentials

Tank Layout



<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	1	East	-0.224	-0.597
Will Bierwirth	6/9/2015		North	-0.181	-0.609
Will Bierwirth	6/9/2015		West	-0.273	-0.847
Will Bierwirth	6/9/2015		South	-0.292	-0.889

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	2	East	-0.268	-0.910
Will Bierwirth	6/9/2015		North	-0.163	-0.658
Will Bierwirth	6/9/2015		West	-0.239	-0.937
Will Bierwirth	6/9/2015		South	-0.279	-0.994

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	3	East	-0.213	-1.043
Will Bierwirth	6/9/2015		North	-0.152	-0.814
Will Bierwirth	6/9/2015		West	-0.18	-1.054
Will Bierwirth	6/9/2015		South	-0.208	-1.150

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	4	East	-0.176	-0.997
Will Bierwirth	6/9/2015		North	-0.137	-0.646
Will Bierwirth	6/9/2015		West	-0.141	-0.654
Will Bierwirth	6/9/2015		South	-0.169	-0.820



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<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	5	East	-0.195	-0.826
Will Bierwirth	6/9/2015		North	-0.18	-0.918
Will Bierwirth	6/9/2015		West	-0.161	-0.656
Will Bierwirth	6/9/2015		South	-0.174	-0.567

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	6	East	-0.247	-0.940
Will Bierwirth	6/9/2015		North	-0.226	-1.127
Will Bierwirth	6/9/2015		West	-0.207	-0.870
Will Bierwirth	6/9/2015		South	-0.211	-0.710

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	7	East	-0.346	-0.949
Will Bierwirth	6/9/2015		North	-0.288	-1.112
Will Bierwirth	6/9/2015		West	-0.259	-0.939
Will Bierwirth	6/9/2015		South	-0.289	-0.707

<u>Technician</u>	<u>Date</u>	<u>Tank Number</u>	<u>Test Point</u>	<u>Native Potential (V)</u>	<u>On Potential (V)</u>
Will Bierwirth	6/9/2015	8	East	-0.38	-0.697
Will Bierwirth	6/9/2015		North	-0.345	-0.900
Will Bierwirth	6/9/2015		West	-0.388	-0.891
Will Bierwirth	6/9/2015		South	-0.387	-0.659

If you have any questions, please don't hesitate to contact me at (303) 390-1333 or kelli.graff@whiting.com.

Regards,

Kelli Graff
Pipeline Compliance Specialist
Whiting Petroleum Corporation