

Project Mustang Ranch - Gathering Project AFE/Work Order No. 5000005

Pipeline DP 407 to DP 9 SE South Mustang  
(Name) (Location)

Testing Contractor Nitrogen Services

Pipe O.D. 6.75 Wall thickness 250 psi Grade Flex MFG'R: Flexsteel

Test Fluid Water Additive \_\_\_\_\_

Test Location: DP 9 SE Section No. 1+41 - 54+94

Instrumentation: DP 9 SE Deadweight  
(Location) (Type)

Refinery Supply 5366 2/5/18  
(Mfg'r) (S/N) (Date Calibrated)

Time	Pressure PSIG	Ambient Temp.
1200	1031	84
1230	1029	86
1300	1028	87
1330	1027	88
1400	1026	90
1430	1025	90
1500	1024	91
1530	1023	91
1600	1023	91
1630	1022	91
1700	1020	91

Time	Pressure PSIG	Ambient Temp.
1730	1019	90
1800	1017	89
1830	1015	88
1900	1013	86
1930	1008	85
2000	1006	84

Time	Pressure PSIG	Ambient Temp.

Test Started 1200 AM/PM 7-14-18 Test Ended 8:00 AM/PM 7-14-18  
(Time) (Date) (Time) (Date)

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Weather: \_\_\_\_\_

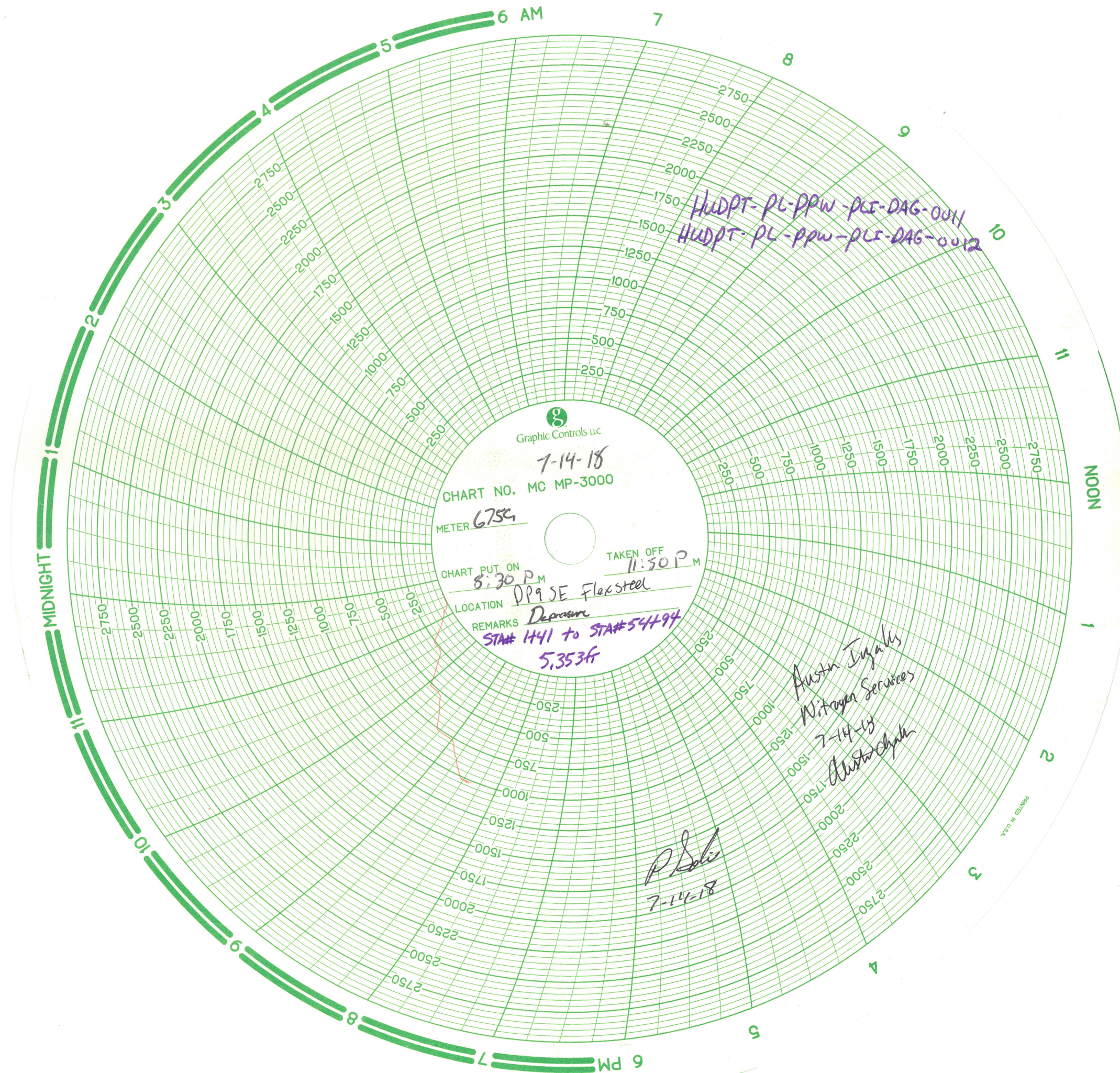
Testing Contractor's Representative Austin Ingalls Supervisor Austin Ingalls 7-14-18  
(Name) (Title) (Signature) (Date)

Constr. Contractor's Representative DANNY KITCHELL QA/QC DJ Kitchell 7-14-18  
(Name) (Title) (Signature) (Date)

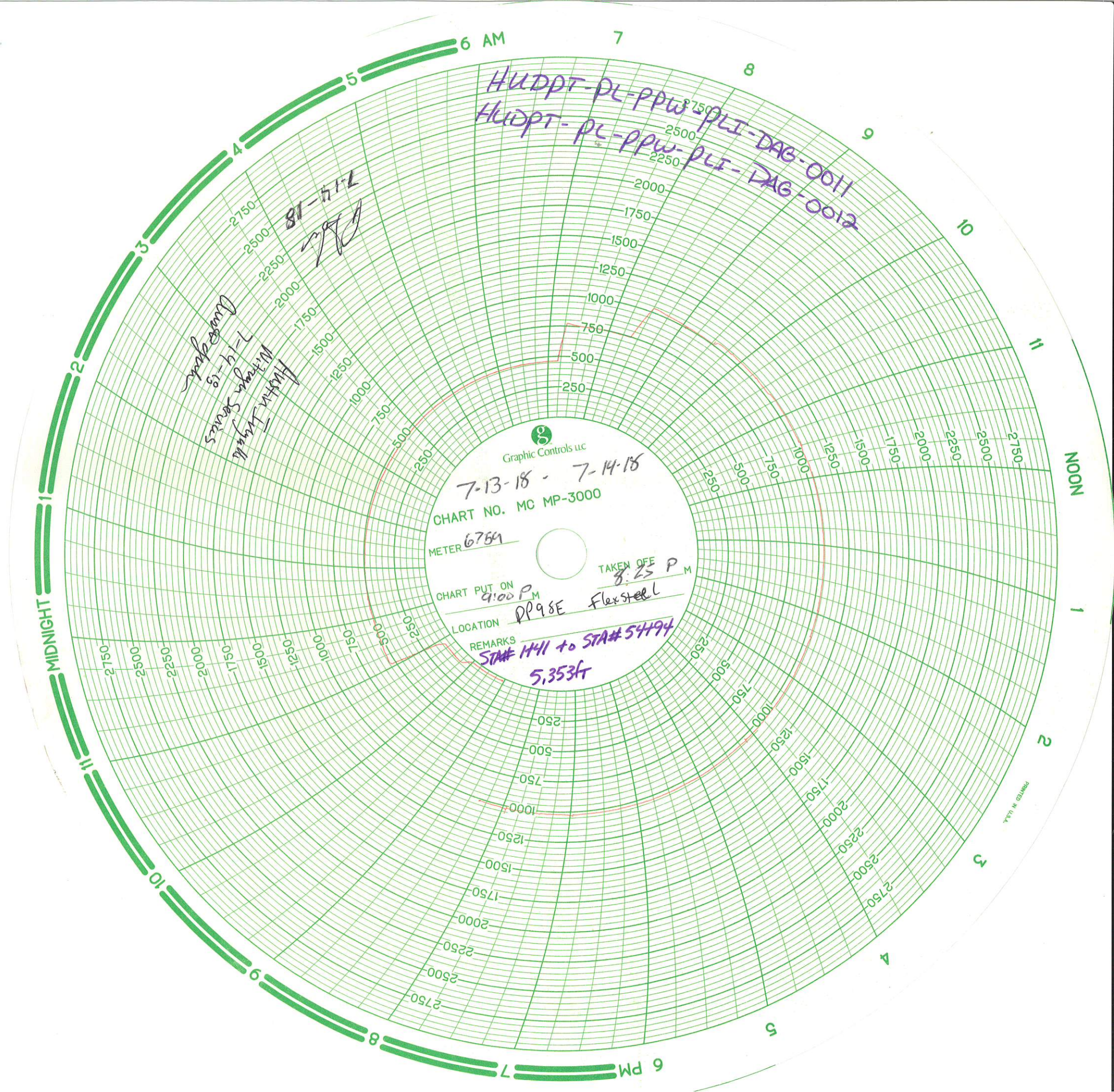
Company Representative Providence Solis Utility Inspector Providence Solis 7-14-18  
(Name) (Title) (Signature) (Date)

Construction Superintendent Jorge Lopez Superintendent Jorge Lopez 7-14-18  
(Name) (Title) (Signature) (Date)

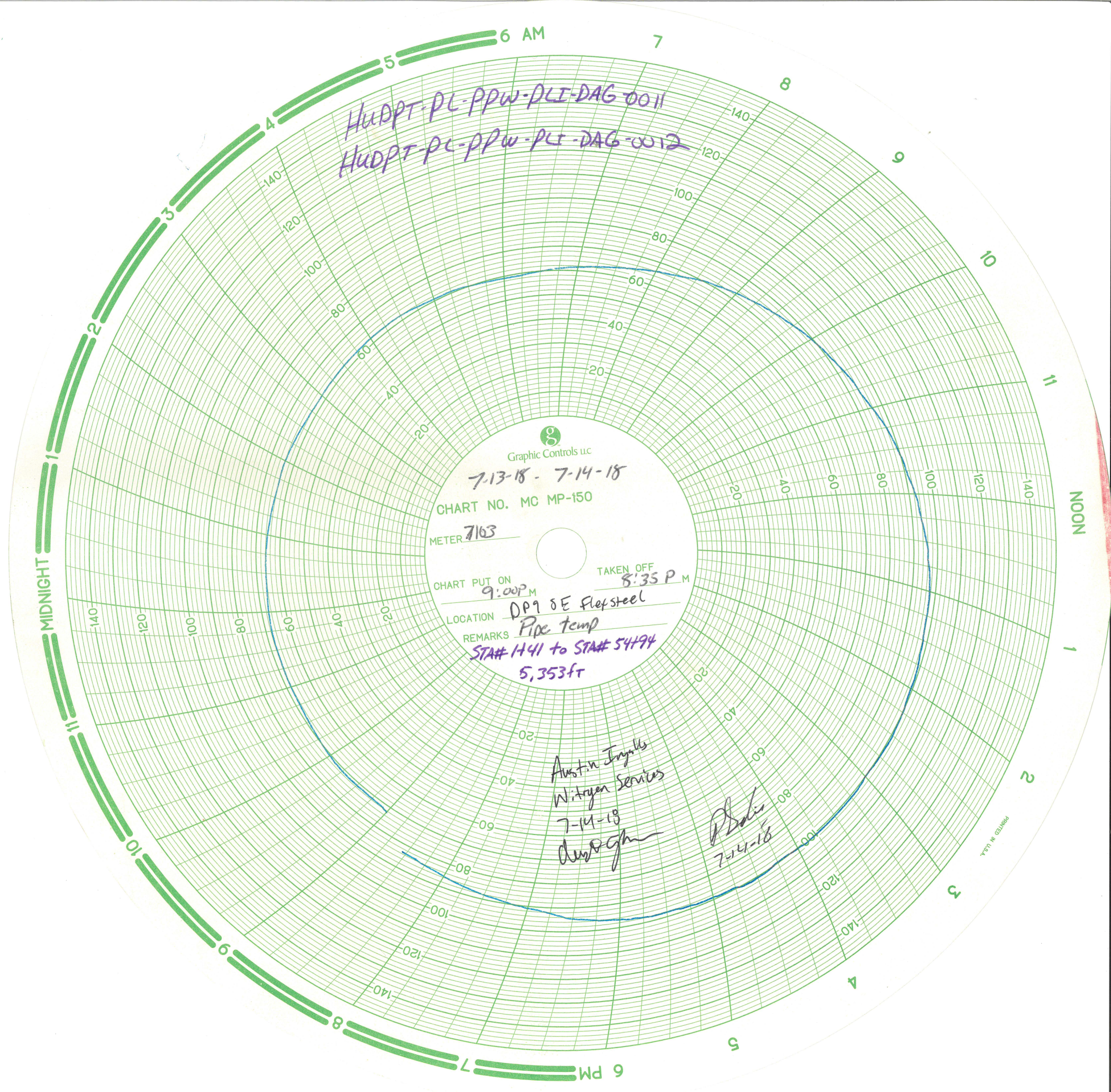




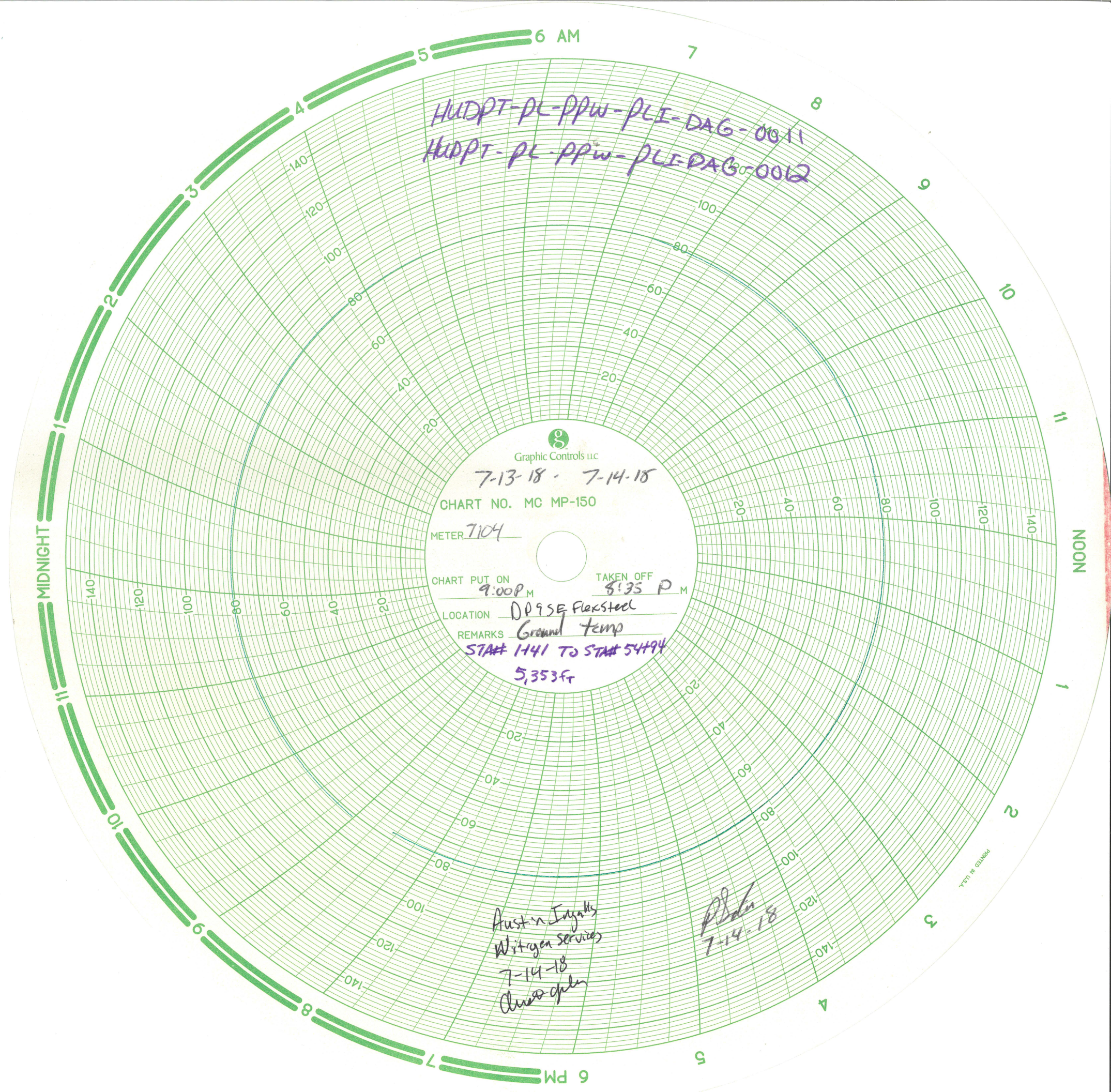




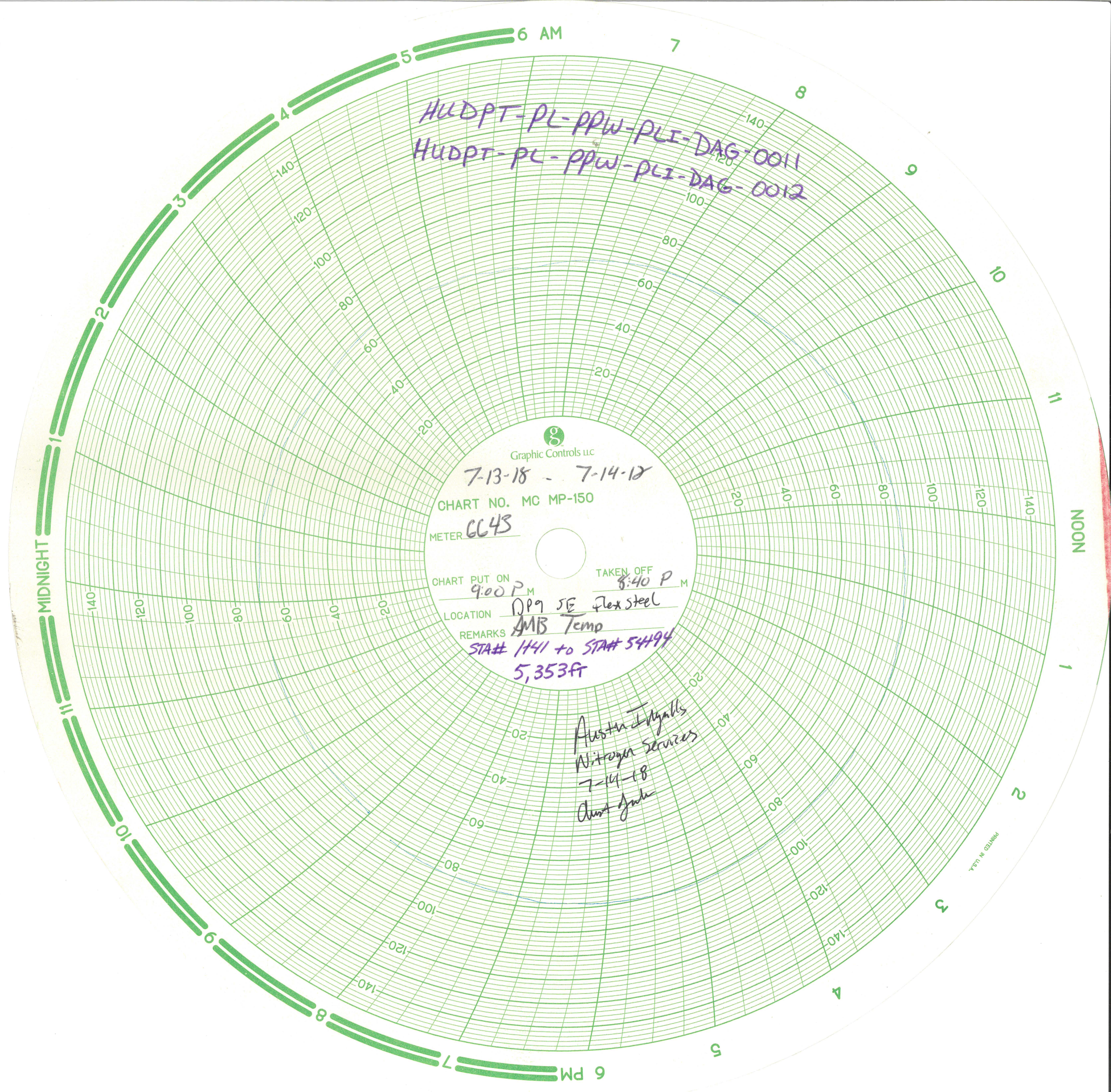














# Calibration Papers

Deadweight SN# **5366**

Pressure Temp SN# **6759**

Temp SN# **7103**

Temp SN# **7104**

Temp SN# **6643**





# PIPELINE SUPPLY & SERI

## Calibration Certificate

**Date Calibrated:** 02/05/2018 **Due Date:** 02/05/2019

**Indicated Pressure Range:** 50-3000 PSI

**Serial No:** 5366

**Manufacture:** REFINERY SUPPLY COMPANY

**Type of Instrument Calibrated:** BRASS DEAD WEIGHT

**Instrument Findings / Status:** Unit is in tolerance and meets or exceeds specifications.

**Based on International Standings of Gravity:** (980.665cm./sq.)

**Based on Calibrated piston area:** NA

**Type of standard used to calibrate:** Chandler Dead Weight test unit spt. (35255-3) Serial No. 5278

**All Standards directly traceable to National Institute of Standards & Technologies Test No. N.I.S.T.)-**

2.6/172490 & 6.6/139577

**Calculated using mass Values, Area, AO, and Stated Gravity. Room Temperature / Humidity at the time of testing:** 72°F @ 22%Humidity

**Specifics:** +/-0.05% Accuracy

**Calibrated by:** NICK BEDFORD @ PSS/9700 E 104TH AVE HENDERSON CO 80640



# **PSS-COMPANIES**



9700 E. 104<sup>TH</sup> AVE, UNIT F- HENDERSON, CO 80640 - Phone (303)857-7986 - Fax (303)389-4945

## **CALIBRATION CERTIFICATE**

**CERTIFICATE NUMBER: CO**

**Details +/-: 1.0% ACCURACY**

**DATE CALIBRATED: 02/05/2018**  
**DUE DATE: 02/05/2019**

**INDICATED TEMPERATURE RANGE: # 0 – 150°F**  
**INDICATED PRESSURE RANGE: #0 – 3000 PSI**  
**SERIAL NO: 6759**  
**MANUFACTURER: CHARTS LTD/ 12" RECORDER**

**TYPE OF INSTRUMENT CALIBRATED: TEMPERATURE / PRESSURE RECORDER**

**INSTRUMENT FINDINGS/STATUS: UNIT IS IN TOLERANCE/ INSTRUMENT MEETS OR EXCEEDS SPECIFICATIONS.**

**BASED ON INTERNATIONAL STANDARDS OF GRAVITY: (980.665 cm./sq.).**

**TYPE OF STANDARD USED TO CALIBRATE: REFINERY DEADWEIGHT TEST UNIT SPT. (35225-3) SERIAL No. 5268: KESSLER TEST THERMOMETERS; SERIAL NO. CALIBRATION**

**ALL STANDARD DIRECTLY TRACEABLE TO NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGIES TEST NO: (N.I.S.T.) 2.6/172490 & 6.6/139577.**

**CALCULATED USING MASS VALUES, AREA, AO, AND STATED GRAVITY.**  
**ROOM TEMPERATURE/HUMIDITY (AT TIME OF TEST): 66°F / 25%.**

**CALIBRATED BY: NICK BEDFORD**

  
\_\_\_\_\_  
**SIGNATURE**



# P-SS-SS-COMPANIES



9700 E. 104th Ave. Unit H Henderson, CO 80640

## CALIBRATION CERTIFICATE

CERTIFICATE NUMBER: CO

Details +/-: 1.0% ACCURACY

**DATE CALIBRATED:** 02-05-2018

**DUE DATE:** 02-05-2019

**INDICATED TEMPERATURE RANGE:** # 0 – 150°F

**SERIAL NO:** 7103

**MANUFACTURER:** CHARTS LTD COMPANY 12" RECORDER

**TYPE OF INSTRUMENT CALIBRATED:** TEMPERATURE RECORDER.

**INSTRUMENT FINDINGS/STATUS:** UNIT IS IN TOLERANCE/ INSTRUMENT MEETS OR EXCEEDS SPECIFICATIONS.

**BASED ON INTERNATIONAL STANDARDS OF GRAVITY:** (980.665 cm./sq.).

**TEMPERATURE COEFFICIENT (Ac + AP):** 25.9 x e-06 1/°C (14.4 X E-06 1/°F).

**TYPE OF STANDARD USED TO CALIBRATE:** TEMPERATURE BATHE USING TAYLOR TEST THERMOMETERS; SERIAL NO; 63F6165, 64F2744, 65F3056.

**ALL STANDARD DIRECTLY TRACEABLE TO NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGIES TEST NO:** (N.I.S.T.) 2.6/172490 & 6.6/139577.

**CALCULATED USING MASS VALUES, AREA, A<sub>o</sub>, AND STATED GRAVITY.**

**ROOM TEMPERATURE/HUMIDITY (AT TIME OF TEST):** 64°F / 25%.

**CALIBRATED BY:** NICK BEDFORD

SIGNATURE



# P-SS-SS-COMPANIES



9700 E. 104th Ave. Unit H Henderson, CO 80640

## CALIBRATION CERTIFICATE

CERTIFICATE NUMBER: CO

Details +/-: 1.0% ACCURACY

**DATE CALIBRATED:** 02-05-2018

**DUE DATE:** 02-05-2019

**INDICATED TEMPERATURE RANGE:** # 0 – 150°F

**SERIAL NO:** 7103

**MANUFACTURER:** CHARTS LTD COMPANY 12" RECORDER

**TYPE OF INSTRUMENT CALIBRATED:** TEMPERATURE RECORDER.

**INSTRUMENT FINDINGS/STATUS:** UNIT IS IN TOLERANCE/ INSTRUMENT MEETS OR EXCEEDS SPECIFICATIONS.

**BASED ON INTERNATIONAL STANDARDS OF GRAVITY:** (980.665 cm./sq.).

**TEMPERATURE COEFFICIENT (Ac + AP):** 25.9 x e-06 1/°C (14.4 X E-06 1/°F).

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**ALL STANDARD DIRECTLY TRACEABLE TO NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGIES TEST NO:** (N.I.S.T.) 2.6/172490 & 6.6/139577.

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**ROOM TEMPERATURE/HUMIDITY (AT TIME OF TEST):** 64°F / 25%.

**CALIBRATED BY:** NICK BEDFORD

SIGNATURE



# CHARTS Ltd.

GAS MEASUREMENT

CALIBRATION CERTIFICATE	
Cert Date;	8/30/2017
Due Date:	8/30/2018

Customer: Nitrogen Services  
 Model: Clp 12"  
 SERIAL# 7104

This is to certify that this instrument has been inspected and tested against ADDITEL Digital Gauge ADT680-GP3K, S#21816110004 Calibrated (2-22-17). Reference Standard#1244 Certified-- with Piston Gauge PG7202 Traceability#1500155509 to NIST. Calibrated in accordance with ISO Quality Standards

This instrument is certified to be accurate within +/- 1% of nominal value

Input Type/ Range:		Color: Red	
Pen Number: N/A			
Ascending		Descending	
Applied:	Reading:	Applied:	Reading:

Input Type/ Range:		Color:	
Pen Number:			
Ascending		Descending	
Applied:	Reading:	Applied:	Reading:

Input Type/ Range: 0-150F		Color: Green	
Pen Number: 2			
Ascending		Descending	
Applied:	Reading:	Applied:	Reading:
0	0	150	150
32	32	32	32
150	150	0	0

P.O. BOX 2983 2031 TRADE DR.  
 MIDLAND, TX 79706  
 (432) 697-7801 (432) 520-3564

Technician: Garold Coleman LP



# PSS-COMPANIES



9700 E. 104th Ave. Unit H Henderson, CO 80640

## CALIBRATION CERTIFICATE

CERTIFICATE NUMBER: CO

Details +/-: 1.0% ACCURACY

DATE CALIBRATED: 04-03-2018

DUE DATE: 04-03-2019

INDICATED TEMPERATURE RANGE: # 0 – 150°F

SERIAL NO: 6643

MANUFACTURER: CHARTS LTD 12" RECORDER

TYPE OF INSTRUMENT CALIBRATED: TEMPERATURE RECORDER.

INSTRUMENT FINDINGS/STATUS: UNIT IS IN TOLERANCE/ INSTRUMENT MEETS OR EXCEEDS SPECIFICATIONS.

BASED ON INTERNATIONAL STANDARDS OF GRAVITY: (980.665 cm./sq.).

TEMPERATURE COEFFICIENT (Ac + AP): 25.9 x e-06 1/°C (14.4 X E-06 1/°F).

TYPE OF STANDARD USED TO CALIBRATE: TEMPERATURE BATHE USING TAYLOR TEST THERMOMETERS; SERIAL NO; 63F6165, 64F2744, 65F3056.

ALL STANDARD DIRECTLY TRACEABLE TO NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGIES TEST NO: (N.I.S.T.) 2.6/172490 & 6.6/139577.

CALCULATED USING MASS VALUES, AREA, A<sub>o</sub>, AND STATED GRAVITY.

ROOM TEMPERATURE/HUMIDITY (AT TIME OF TEST): 64°F / 25%.

CALIBRATED BY: NICK BEDFORD

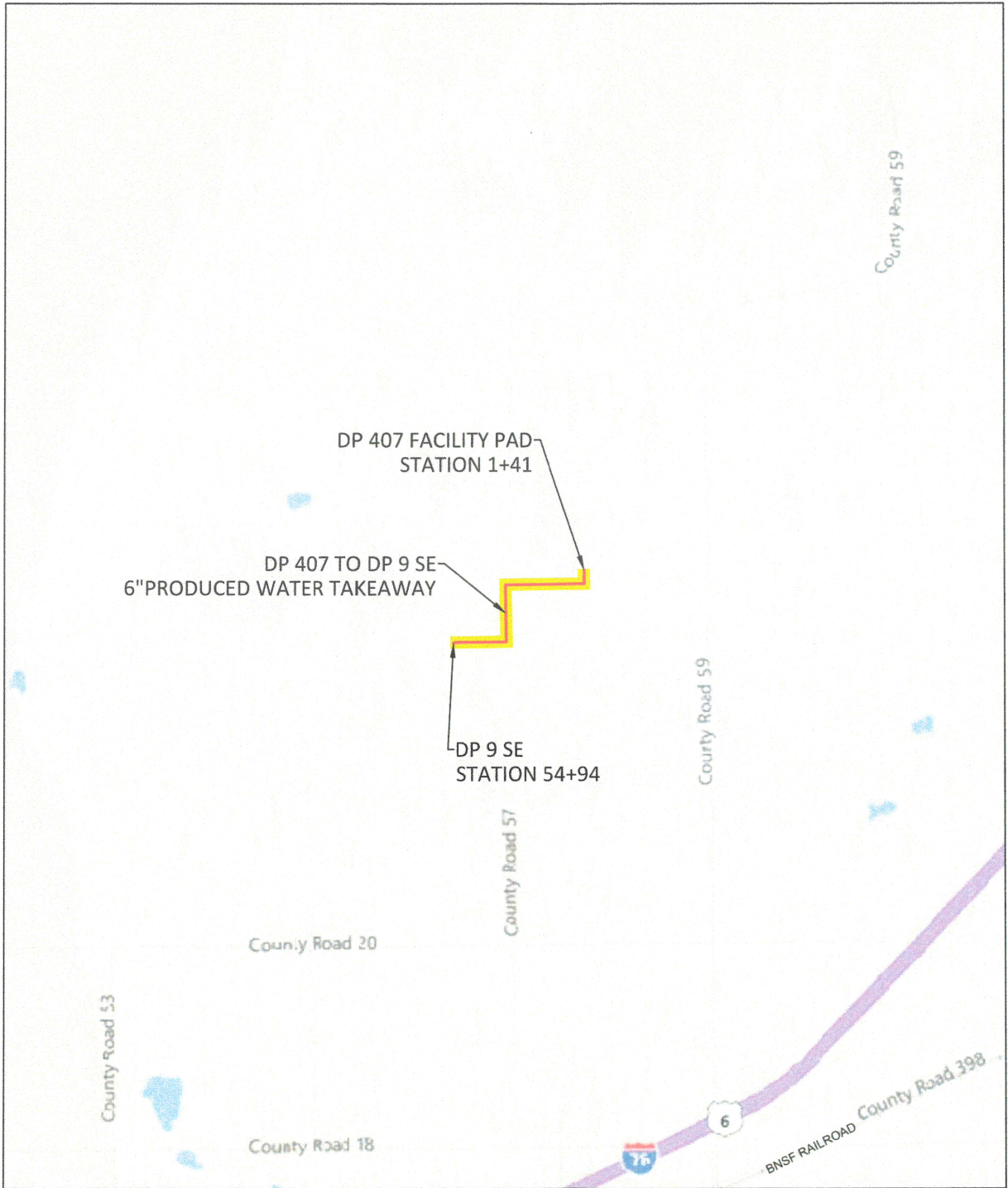
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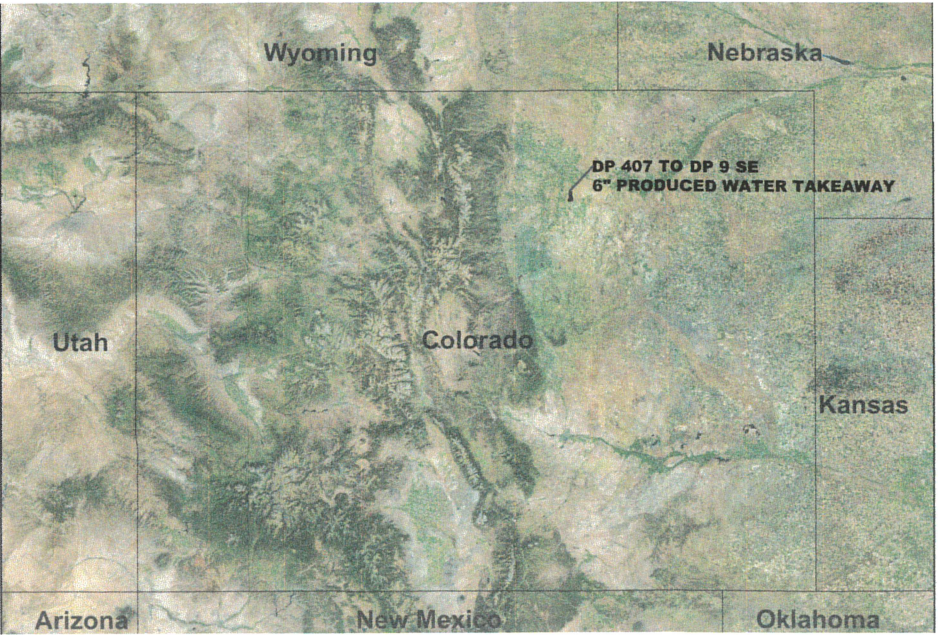
# MUSTANG DP 407 TO DP 9 SE

## 6" PRODUCED WATER TAKEAWAY

- NOTE 1:  
TYPICAL 5' MINIMUM FROM EXISTING GROUND TO TOP OF PIPE.  
IN ADDITION, THE PROFILE SHOWN ON THE ALIGNMENT SHEET DOES NOT REFLECT THE DESIGNED BORE AND HDD PROFILES. REFER TO TYPICAL COUNTY ROAD CROSSING OR HDD DESIGNED PRIOR TO ANY BORE OR HDD CONSTRUCTION.
- NOTE 2:  
HORIZONTAL DATUM IS NAD83(2011) WITH POSITIONS CORRECTED BY OPUS.  
COORDINATES SHOWN HEREON ARE BASED UPON COLORADO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, US FOOT.
- NOTE 3:  
ANNOTATIONS FOR THE IFC PACKAGE ARE USED TO ASSIST THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL CROSSING INFORMATION USING ALL AVAILABLE DOCUMENTATION.
- NOTE 4:  
THE UTILITIES SHOWN HEREIN ARE REPRESENTATIONAL ONLY AND ARE IN NO WAY INTENDED TO SHOW THEIR EXACT LOCATION, NOR IS THIS INFORMATION TO BE CONSTRUED AS A COMPLETE INVENTORY OF ALL UTILITIES AT THIS LOCATION. IT IS THE EXCAVATOR'S RESPONSIBILITY TO HAVE ANY UTILITIES LOCATED BEFORE DIGGING.
- NOTE 5:  
• 6" HIGH TEMP FLEXSTEEL, 6.93" O.D., ANSI 300, MAOP 750 PSIG



VICINITY MAP  
NOT TO SCALE



PROJECT LOCATION  
NOT TO SCALE

DISCLAIMER:  
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

DATA SOURCES:  
-AERIAL IMAGERY: NAIP 2015; ESRI AERIAL IMAGERY; ESRI / BING STREET MAP  
-PARCELS: WELD COUNTY PARCEL MAP 2017  
-OIL WELLS: COLORADO OIL & GAS CONSERVATION COMMISSION  
-WETLANDS: NOBLE DESKTOP ENVIRONMENTAL REVIEW

PUBLICLY AVAILABLE DATA SOURCES HAVE NOT BEEN INDEPENDENTLY VERIFIED BY ASCENT GEOMATICS SOLUTIONS.



SUMMARY OF MATERIAL				REVISIONS			
ITEM	DESCRIPTION	QTY	NO.	DESCRIPTION	DATE	BY	APPR.
1	6" HIGH TEMP FLEXSTEEL, 6.93" O.D., ANSI 300, MAOP 750 PSIG	5,353'	0	ISSUED FOR CONSTRUCTION	10/03/17	TLJ	GFP
2	PIPELINE MARKER	5	1	REVISED ISSUED FOR CONSTRUCTION	10/22/17	KR	GFP



PREPARED FOR:

### MUSTANG DP 407 TO DP 9 SE 6" PRODUCED WATER TAKEAWAY COVER SHEET WELD COUNTY, COLORADO

DRAWN BY: TLJ	CREATION DATE: 09/11/17	AFE No.: 5000005
APPROVED: GFP	APPR. DATE: 10/02/17	
DWG. No.:	HUDPT-PL-PPW-PLI-LST-0006	SHEET No. 1 OF 4
SCALE: N.T.S.		




# MUSTANG DP 407 TO DP 9 SE

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## 6" PRODUCED WATER TAKEAWAY

[illegible]

VICINITY MAP  
NOT TO SCALE

<div><p><b>ASCENT</b> GEOMATICS SOLUTIONS 7535 Milltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com</p></div>	<div>①</div>	SUMMARY OF MATERIAL			REVISIONS					
		ITEM	DESCRIPTION	QTY	NO.	DESCRIPTION	DATE	BY	APPR	
		1	6" HIGH TEMP FLEXSTEEL- 6.93' O.D., ANSI 300, MAOP 750 PSIG	5,353	0	ISSUED FOR CONSTRUCTION	10/03/17	TJL	GFP	
		2	PIPELINE MARKER	5	1	REVISED ISSUED FOR CONSTRUCTION	10/22/17	KR	GFP	

**DISCLAIMER:**

THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEFECTED HAVE NOT BEEN FIELD VERIFIED AND ARE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

**DATA SOURCES:**

- AERIAL IMAGERY: NAD 2015
- PARCELS: NELD COUNTY PUBLIC MAP, MAP 2017
- OIL WELLS: COLORADO OIL & GAS CONSERVATION COMMISSION
- WETLANDS: WETLAND DATA/SCOP ENVIRONMENTAL REVIEW

PUBLICLY AVAILABLE DATA SOURCES HAVE NOT BEEN INDEPENDENTLY VERIFIED BY AERENT GEOMATICS SOLUTIONS



**MUSTANG DP 407 TO DP 9 SE**  
**6" PRODUCED WATER TAKEAWAY INDEX SHEET**  
**WELD COUNTY, COLORADO**

DRAWN BY: TLJ	CREATION DATE: 09/11/17	AFE No.: 5000005
APPROVED: GFP	APPR. DATE: 10/02/17	
SCALE: N.T.S.	DWG. No.: <b>HUDPT-PL-PPW-PLI-LST-0007</b>	SHEET No. 2 OF 4
		