



Hydrostatic Test Pressure Log

Test Start Date: 03-10-2017

Pipeline or Fabrication Name: Noble DP 205/206-LC24-6" O.I Pipeline

Pipeline or Fabrication Location: New Raymer

Job #: _____

Client: Noble

AFE# _____

Pipe O.D.: 6.625"

Grade: B

W.T. .28"

STA No.: 00+00

To STA No.: 60+75.41

Volume: 9,114 Gals.

Dead Weight Tester Serial No.: 6153

Digital: 355993

Chart Recorder Serial No.: 8740

Inspection Rep.: _____

Readings to be entered at 15 min. intervals

BEES Rep: Ryan Chapman

Time	Dead Weight Press.	Digital Gauge Press.	Ambient Temp. Deg. F.	Line Temp. Deg. F.	Water +/- gals.	Remarks
6:40 AM	Started	Pressuring	23	40		
6:45	516	515	23	41		
7:00	515	514	25	42		
7:15	802	801	26	43		
7:30	801	800	27	43		
7:45	800	799	28	43		
8:00	799	798	30	42		
8:15	797	796	32	42		
8:30	796	795	32	41		
8:45	794	793	32	41		
9:00	793	792	33	41		@ 9:05 AM Test Pressure Reached
9:15	1016	1015	33	40		
9:30	1012	1011	35	40		
9:45	1008	1007	35	40		
10:00	1003	1002	37	40		
10:15	995	994	38	40		@ 10:25 AM Bumped Pressure Back
10:30	1019	1018	40	40		VP Because of Pressure Lost
10:45	1010	1010	42	40		
11:00	1004	1003	45	40		
11:15	995	994	47	40		
11:30	988	987	49	39		@ 11:40 AM Bumped Pressure Back Up
11:45	1023	1022	51	39		Because of Pressure Lost
12:00 PM	1022	1021	53	39		@ 11:45 AM Start of 8 Hr. Hydro Test
12:15	1021	1020	55	39		

Test No.: 1

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Tel: 970-532-0600
 Fax: 970-532-4847
 100 Commerce Drive
 Berthoud CO. 80513

www.BlackEagleEnergyServices.com



Hydrostatic Test Pressure Log

Test Start Date: 03-10-2017

Pipeline or Fabrication Name: Noble DP 205/206-LC24-6" O.I Pipeline

Pipeline or Fabrication Location: New Raymer Job #: _____

Client: Noble AFE# _____

Pipe O.D.: 6.625" Grade: B W.T. .28"

STA No.: 00+00 To STA No.: 60+75.41 Volume: 9,114 Gals.

Dead Weight Tester Serial No.: 6153 Digital: 355993

Chart Recorder Serial No.: 9740 Inspection Rep.: _____

Readings to be entered at 15 min. intervals BEES Rep: Ryan Olson

Time	Dead Weight Press.	Digital Gauge Press.	Ambient Temp. Deg. F.	Line Temp. Deg. F.	Water +/- gals.	Remarks
12:30	1021	1020	54	39		
12:45	1020	1019	56	39		
1:00	1020	1019	56	39		
1:15	1020	1019	58	39		
1:30	1020	1019	59	39		
1:45	1020	1019	60	39		
2:00	1020	1019	59	39		
2:15	1021	1020	59	40		
2:30	1020	1019	59	40		
2:45	1020	1019	60	40		
3:00	1021	1020	60	40		
3:15	1021	1020	58	39		
3:30	1021	1020	58	39		
3:45	1021	1020	57	40		
4:00	1021	1020	56	40		
4:15	1020	1019	55	41		
4:30	1020	1019	55	41		
4:45	1020	1019	55	41		
5:00	1019	1018	53	41		
5:15	1019	1018	51	41		
5:30	1019	1018	51	42		
5:45	1018	1017	50	42		
6:00	1018	1017	49	42		
6:15	1017	1016	49	42		

Test No.: 1 Page 2 Of 3

Tel: 970-532-0600
 Fax: 970-532-4847
 100 Commerce Drive
 Berthoud CO. 80513

www.BlackEagleEnergyServices.com



Hydrostatic Test Pressure Log

Test Start Date: 03-10-2017

Pipeline or Fabrication Name: Noble DP 205/206-LC24-6" Oil Pipeline

Pipeline or Fabrication Location: New Raymer

Job #: _____

Client: Noble

AFE# _____

Pipe O.D.: 6.625' Grade: B W.T. .28"

STA No.: 00+00 To STA No.: 60+75.41 Volume: 9.114 Gals.

Dead Weight Tester Serial No.: 6153 Digital: 355993

Chart Recorder Serial No.: 8740

Inspection Rep.: _____

Readings to be entered at 15 min intervals

BEES Rep: Ryan Lopez

[illegible]

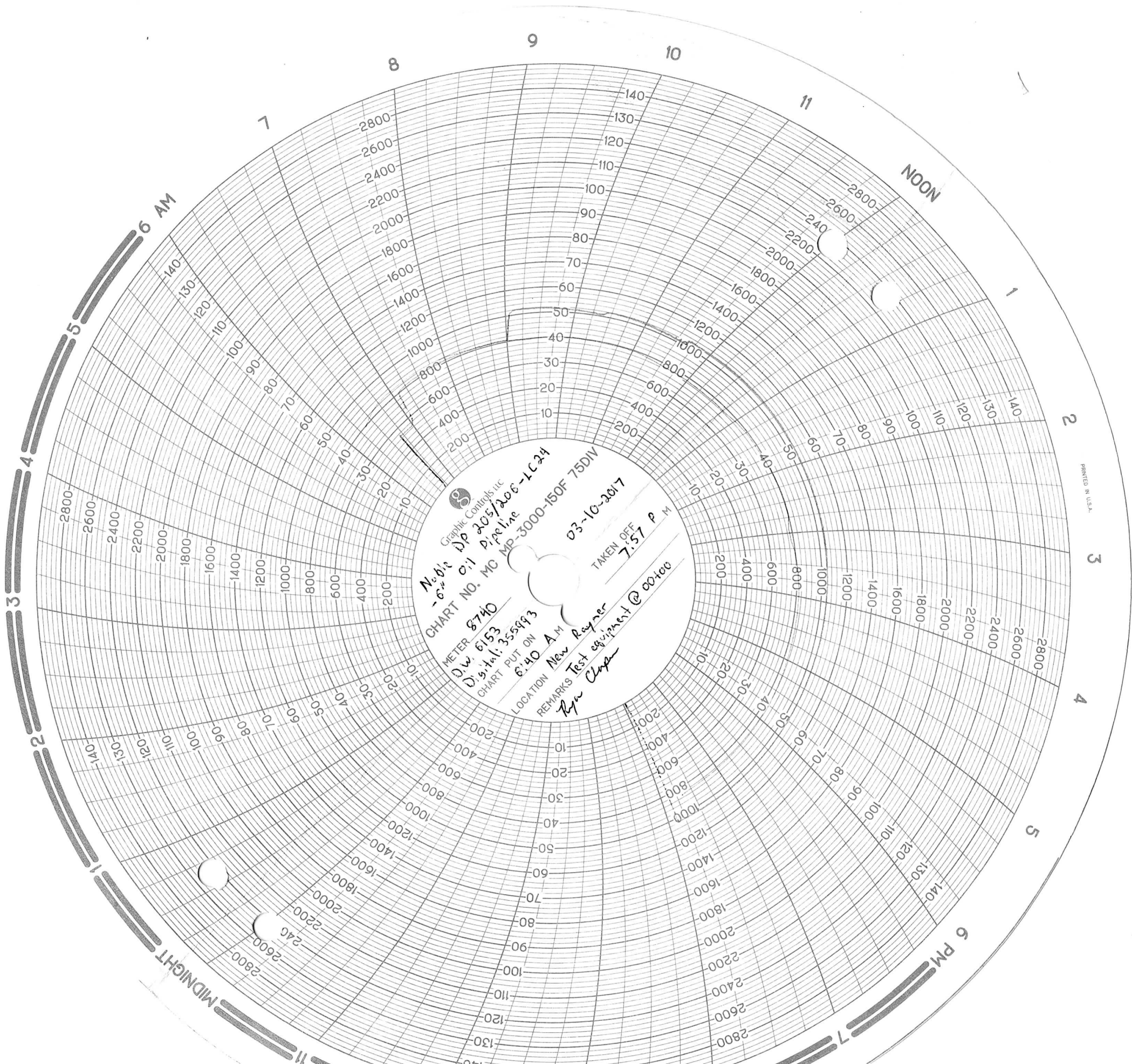
Test No.: 1

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Laerie Inc. Certificate of Traceable Calibration

Laerie, Inc. Issues this Certificate of Calibration to:

Purchase Order: 19664

BlackEagle 100

Certificate Number: 25095.0421

100 Commerce Drive Berthoud CO. 80513

For Asset: 6153	This calibration is traceable to the international system of units(SI), through National Institute of Standards and Technology (NIST). Hutchinson's method is used including Guard Banding and TUR Strategy, False-Accept Risk normal distribution and 95% confidence level typical with coverage factor of 2. BlackEagle 100 : accepts and understands measurement uncertainties and risk assessment in all measurements involved in calibration. PJLA ISO 17025: 2005 Accreditation Number 73303 valid from FEB 26, 2013 And Platinum Registration ISO 9001: 2008 Registration Number 4123211 valid from MAR 29, 2006
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Manufacturer	Model	Serial Number	Description	Calibrated	Int. MTh's	Re-Cal
The Refinery Supply Company	35265-1	6153	Dead Weight Tester	1/30/17	12	1/30/2018

As- Received Condition(s)

C-Procedure	Environmental	
MPS-TRSC-35250-5	73.4°F ±9°F, 40 to 65%RH	2) Annual maintenance performed, normal exterior cosmetic wear, exterior cleaned where possible, initial inspection PASS.

Calibration Event:

5) 2FL: NIST Traceable & Registered ISO9001:2008 Calibration UUT PASS with FOUND-LEFT Published Data (Z540-3 Compliant)

Primary Standards Traceability Number Used in Calibration					
STD	Projected Re-Cal.	Description	STD	Projected Re-Cal.	Description
0011	10/2017	Precision Pres. Gauge			

Comments:

www.laerie.com

Procedure Executed by:
JDW

Laerie, Inc.
332 Mountain View Road Unit 2
Berthoud, CO 80513
877-532-7990 TF, 970-532-7990 Main, 970-532-7992 Fax

CALIBRATION LOCATION: Laerie Inc. Lab

Approved by:

Larry E. Armfield CEO/President

W.W. Scott Jr. EE, PE, QM

TCC 2016-12A

Procedure:
MPS/TRSC35250-5

Laerie
Calibration Services

Calibration Event: FOUND-LEFT
Manufacturer: The Refinery Supply Company
Model: 35265-12
S/N: 6153
ID: 6153
PO#
CAL-DATE: 1/30/2017
CAL-DUE: 1/30/2018
Environmental: 73.4°F±(9°F) RH(40 to 65)%
Technician: JDW

Customer Info.
Black Eagle

UUT Area in²
0.02903 0

Calibration
Description

FOUND-LEFT DATA

3

% Span / Weight ID	UUT Weight lb.	UUT PSIG	STD Measured PSIG	disagreement	%	Evaluation
0.00		50	50.000	0.000	0.00%	PASS
50/J		50	50.000	0.000	0.00%	PASS
100/G		100	100.000	0.000	0.00%	PASS
100/I		100	100.000	0.000	0.00%	PASS
100/H		100	100.000	0.000	0.00%	PASS
100/F		100	100.000	0.000	0.00%	PASS
50/K,L,M,N,R		50	50.000	0.000	0.00%	PASS
500/A		500	500.000	0.000	0.00%	PASS
500/E		500	500.000	0.000	0.00%	PASS
500/D		500	500.000	0.000	0.00%	PASS
500/C		500	500.000	0.000	0.00%	PASS
500/B		500	500.000	0.000	0.00%	PASS
N/A						
N/A						
N/A						
N/A						

Radius in 0.096127707

Diameter of in 0.192255413

UUT TOTAL UNCERTAINTY (± 0.05% FS)

Force of 2.903 lb *psi is* 100

Calibration Event: **PASS FOUND-LEFT**

- FOUND-LEFT → Calibration Event - Data from UUT, no adjustment performed.
- AS-FOUND → Calibration Event - Data from UUT, Pre-Adjustment.
- AS-LEFT → Calibration Event - Data from UUT, Post-Adjustment.

Laerie, inc.
Calibration Services
332 Unit 2 Mountain View Rd.
Berthoud, Colorado 80513
Office: 970-532-7990
Fax: 970-532-7992
TF: 1-877-532-7990

Approved by: W.W. Scott Jr.
PE, EE, PSE, QM

www.laerie.com
Page 1 of 2

Calibration Service / Metrology Consultants

UUT Manufacturer: Crystal Engineering	Calibration Event: FOUND-LEFT	Customer Info.
Model: M1	Description: 0-3000 PSI Pressure gauge	BLACK EAGLE 100
S/N: 355993	ID: 355993	
CAL-DATE: 1/31/2017	CAL-DUE: 1/31/2018	
	Eng. / Metrologist: JRN	

Calibration performed Accredited to PJLA ISO17025: 2005 Accreditation #73303 and Z540-3 compliant.

Platinum Registration ISO 9001: 2008 Registration #4123211.

Calibration Performed:	STD Sourced (PSI)	Min (PSI)	UUT Ind. (PSI)	Max (PSI)	Evaluation
AS-LEFT Pressure	0.0	-1.2	0.0	1.2	PASS
	500.0	498.80	500.0	501.20	PASS
	1500.0	1497.0	1499.9	1503.0	PASS
	3000.0	2994.0	3000.1	3006.0	PASS

Calibration Event:	PASS AS-LEFT
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• FOUND-LEFT →	Calibration Event - Data from UUT, No Adj. Performed
• AS-FOUND →	Calibration Event - Data from UUT, Pre-Adjustment
• AS-LEFT →	Calibration Event - Data from UUT, Post-Adjustment

Laerie , inc.**Calibration Services****332 Unit 2 Mountain View Rd.****Berthoud, Colorado 80513****Office: 970-532-7990****TF: 1-877-532-7990 Fax: 970-532-7992**www.laerie.com

This report shall not be modified or reproduced except in full and with the written approval of Laerie Inc.

Calibration Service / Metrology Consultants

UUT Manufacturer: Crystal Engineering	Calibration Event: FOUND LEFT	Customer Info.
Model: M1	Description: 0-3000 PSI Pressure gauge	BLACK EAGLE 100
S/N: 355993	ID: 355993	
CAL-DATE: 1/31/2017	CAL-DUE: 1/31/2018	
	Eng. / Metrologist: JRN	

Calibration performed Accredited to PJLA ISO17025: 2005 Accreditation #73303 and Z540-3 compliant.

Platinum Registration ISO 9001: 2008 Registration #4123211.

Calibration Performed:	STD Sourced (PSI)	Min (PSI)	UUT Ind. (PSI)	Max (PSI)	Evaluation
AS-FOUND Pressure	0.0	-1.2	0.0	1.2	PASS
	500.0	498.80	500.0	501.20	PASS
	1500.0	1497.0	1499.9	1503.0	PASS
	3000.0	2994.0	3000.1	3006.0	PASS

Calibration Event:	PASS AS-FOUND
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Laerie Inc. Certificate of Traceable Calibration

Laerie, Inc. Issues this Certificate of Calibration to:

Purchase Order: 19664

BlackEagle 100

Certificate Number: 100732.0268

100 Commerce Drive Berthoud CO. 80513

For Asset: **355993** This calibration is traceable to the international system of units(SI), through National Institute of Standards and Technology (NIST).
Hutchinson's method is used including Guard Banding and TUR Strategy, False-Accept Risk normal distribution and 95% confidence level typical with coverage factor of 2.
BlackEagle 100: accepts and understands measurement uncertainties and risk assessment in all measurements involved in calibration.
PJLA ISO 17025: 2005 Accreditation Number 73303 valid from FEB 26, 2013 And Platinum Registration ISO 9001: 2008 Registration Number 4123211 valid from MAR 29, 2006

Manufacturer	Model	Serial Number	Description	Calibrated	Int. MTH's	Re-Cal
Crystal Pressure	ml	355993	3000 PSI Digital Pressure Gage	1/31/17	12	1/31/2018

As- Received Condition(s)

C-Procedure	Environmental	2) Annual maintenance performed, normal exterior cosmetic wear, exterior cleaned where possible, initial inspection
MPS	73.4°F ±9°F, 40 to 65%RH	PASS.
Calibration Event:		
5) 2FL: NIST Traceable & Registered ISO9001:2008 Calibration UUT PASS with FOUND-LEFT Published Data (Z540-3 Compliant)		

[illegible]

Comments:	

www.laerie.com

Procedure Executed by: JRN	Laerie, Inc. 332 Mountain View Road Unit 2 Berthoud, CO 80513 877-532-7990 TF, 970-532-7990 Main, 970-532-7992 Fax	Approved by: Larry E. Armfield CEO/President W.W. Scott Jr. EE, PE, QM
	CALIBRATION LOCATION: Laerie Inc. Lab	TCC 2016-12A

ADDRESS: Evans

QUADCO, LLC

SAFETY RELIEF VALVE REPORT ©

R.O. NO: 40013209

DATE REC'D: 10/28/2016

PO#: 51-97298

Priority: Standard

Type: New

ITEM: 1 of 2

IDENTIFICATION	VALVE DATA		MATERIAL/ DESIGN	ORIGINAL NAMEPLATE DATA
CUST ID #		Current Required	Conventional	TYPE 91-17D51T13E1
LOC	SET PRESS	1000 1250	BASE: C.S.	SET PRESS 1000
	BACK PRESS	Atm. Atm.	BODY: C.S.	BACK PRE N.O.T.
MFG Mercer	C.D. PRESS	1000 1250	TRIM: S.S./teflon	C.D. PRESS N.O.T.
TYPE NO 91-17D51T13E1	TEMP	Amb. Amb.	SPRING: S.S.	TEMP 70° f
SERIAL NO 1266438	BLOWDOWN	Fixed Fixed	CAP & LEVER:	CAP. 2039 scfm
ORIFICE D	CAPACITY	2039 scfm 2542 scfm	Closed	BLOWDOWN N.O.T.
INLET 1 in MNPT	MEDIA	Vapor Vapor	COMPLETED BY	MANUFACTURED
OUTLET 1 in FNPT	VALVE CONVERSION No		Eckhardt, Andrew	CODE STAMP UV
PREVIOUS R.O.	CODE STAMP UV			NB
P.I.D.	NB		DATE 10/27/2016	ASME
	ASME			

WORK REQUIRED	PRELIMINARY TEST RESULTS	SPRING DATA CHECKED?	AS FOUND ADJ
<input type="checkbox"/> Pretest	TEST MEDIA NO TEST GAUGE S/N	Yes	COMP SCREW
<input checked="" type="checkbox"/> Reset	SET PRESSURE NO TEST CAL DUE	SPRING #	LOWER ADJ RING
<input type="checkbox"/> Overhaul	BLOWDOWN NO TEST TESTED BY	05-013	UPPER ADJ RING
<input type="checkbox"/> Warranty	TIGHTNESS TEST DATE	REPLACE	OVERLAP COLLAR
		No	

DISASSEMBLED BY:		DATE	INSPECTED BY:		DATE
ITEM	AS FOUND CONDITION	WORK PERFORMED	INSPECTOR COMMENTS		
BONNET					

[illegible]

Previous Repair Company:

R.O. Number:

Date:

RECORD OF PARTS REQUIRED FOR REPAIR

FINAL ASSEMBLY ADJUSTMENT

PART NUMBER	DESCRIPTION	P.O. #

COMPRESSION SCREW
LOWER ADJUSTMENT RING
UPPER ADJUSTMENT RING
OVERLAP COLLAR

ASSEMBLED BY: Eckhardt, Andrew **DATE** 10/27/2016

DUPLICATE TAG INSTALLED ☐ Yes ☒ No

RECORD OF FINAL TEST RESULTS

TEST MEDIA	Air	GAUGE S/N	3000-1
T PRESSURE	1250	CAL DUE	10/28/2016
BLOWDOWN	Fixed	TESTED BY	Eckhardt, Andrew
TIGHTNESS	Good	TEST DATE	10/27/2016

RECORD OF FINAL ASSEMBLY

If No VR Cert. is issued,
Give Reason Below:

ADJ LKD & SEALED	Yes	If No VR Cert. is issued Give Reason Below:
NAMEPLATE INSTALLED	Yes	Reset & Test
VR'D	Yes	
FINAL		
ASSEM. BY: Eckhardt, Andrew		DATE 10/27/2016

ADDRESS: Evans

QUADCO, LLC

SAFETY RELIEF VALVE REPORT ©

R.O. NO: 40013209

DATE REC'D: 10/28/2016

PO#: 51-97298

Priority: Standard

Type: New

ITEM: 2 of 2

IDENTIFICATION		VALVE DATA		MATERIAL/ DESIGN		ORIGINAL NAMEPLATE DATA	
CUST ID #	LOC	SET PRESS	Current	Required	Conventional	TYPE 91-17D51T13E1	SET PRESS 1000
MFG Mercer		BACK PRESS	Atm.	Atm.	BASE: C.S.	BACK PRE N.O.T.	C.D. PRESS N.O.T.
TYPE NO 91-17D51T13E1		C.D. PRESS	1000	1250	BODY: C.S.	TEMP 70° f	CAP. 2039 scfm
SERIAL NO 1266430		TEMP	Amb.	Amb.	TRIM: S.S./teflon	BLOWDOWN N.O.T.	MANUFACTURED
ORIFICE D		BLOWDOWN	Fixed	Fixed	SPRING: S.S.	CODE STAMP UV	NB
INLET 1 in MNPT		CAPACITY	2039 scfm	2542 scfm	CAP & LEVER: Closed	ASME	
OUTLET 1 in FNPT		MEDIA	Vapor	Vapor	COMPLETED BY		
PREVIOUS R.O.		VALVE CONVERSION No			Eckhardt, Andrew		
P.I.D.		CODE STAMP UV			DATE 10/27/2016		
		NB					
		ASME					

WORK REQUIRED <input type="checkbox"/> Pretest <input checked="" type="checkbox"/> Reset <input type="checkbox"/> Overhaul <input type="checkbox"/> Warranty	PRELIMINARY TEST RESULTS TEST MEDIA NO TEST GAUGE S/N SET PRESSURE NO TEST CAL DUE BLOWDOWN NOTEST TESTED BY TIGHTNESS TEST DATE		SPRING DATA CHECKED? Yes SPRING # 05-013 REPLACE No	AS FOUND ADJ COMP SCREW LOWER ADJ RING UPPER ADJ RING OVERLAP COLLAR
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[illegible]

BONNET

BODY

INTERNAL PARTS

[illegible]

Previous Repair Company:

R.O. Number:

Date:

RECORD OF PARTS REQUIRED FOR REPAIR

FINAL ASSEMBLY ADJUSTMENT

PART NUMBER	DESCRIPTION	P.O. #

COMPRESSION SCREW
LOWER ADJUSTMENT RING
UPPER ADJUSTMENT RING
OVERLAP COLLAR

ASSEMBLED BY: Eckhardt, Andrew **DATE** 10/27/2016

DUPLICATE TAG INSTALLED ☐ Yes ☒ No

RECORD OF FINAL TEST RESULTS

RECORD OF FINAL ASSEMBLY

TEST MEDIA Air
T PRESSURE 1250
BLOWDOWN Fixed
TIGHTNESS Good

GAUGE S/N 3000-1
CAL DUE 10/28/2016
TESTED BY Eckhardt, Andrew
TEST DATE 10/27/2016

ADJ LKD & SEALED Yes
NAMEPLATE INSTALLED Yes
VR'D Yes
FINAL
ASSEM. BY: Eckhardt, Andrew
DATE 10/27/2016

PRESSURING LOG DATA SHEET (EC9)

Project DP 205/206 LC-24 AFE/Work Order No. _____

Pipeline DP 205/206 (Name) LC-24 main line (Location)

Testing Contractor Black Eagle

Pipe O.D. 6.625 WT. .280 Grade X52 MFG'R: _____

Test Fluid H₂O Additive _____

Test Section Location: _____ Length _____ Volume _____

Pump Location: _____ Dead Weight Tester S/N 6153

Pump

(Description) _____ (Mfg'r) _____ (S/N) _____

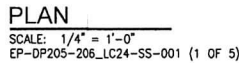
Plunger x _____ Stroke _____ Gallons per Rev. _____

Time	Pressure	Strokes	Volume	Remarks
6:40	0	23°F		Starting to pressure up.
6:45	515	23°F		1st pressure hold.
7:15	802	26°F		2nd pressure hold.
7:45	800	28°F		holding.
8:15	797	32°F		
8:45	794	32°F		
9:15	1015	33°F		At test pressure.
9:30	1011	35°F		
10:00	1002	37°F		
10:25	994	38°F		Bumped pressure up.
10:30	1018	40°F		
11:00	1003	45°F		
11:30	987	49°F		
11:40	1022	49°F		Bumped up pressure again.
11:45	1022	51°F		Start Test
12:00	1021	53°F		
12:30	1020	54°F		
1:00	1019	56°F		
1:30	1019	59°F		
2:00	1019	59°F		
2:30	1019	59°F		
3:00	1020	60°F		
3:30	1020	58°F		
4:00	1020	56°F		
4:30	1019	55°F		


(Contractor Representative)

George M. M. M.

(Company Inspector)




1. INSTALL RF SPEC BLIND FOR PRESSURE TEST

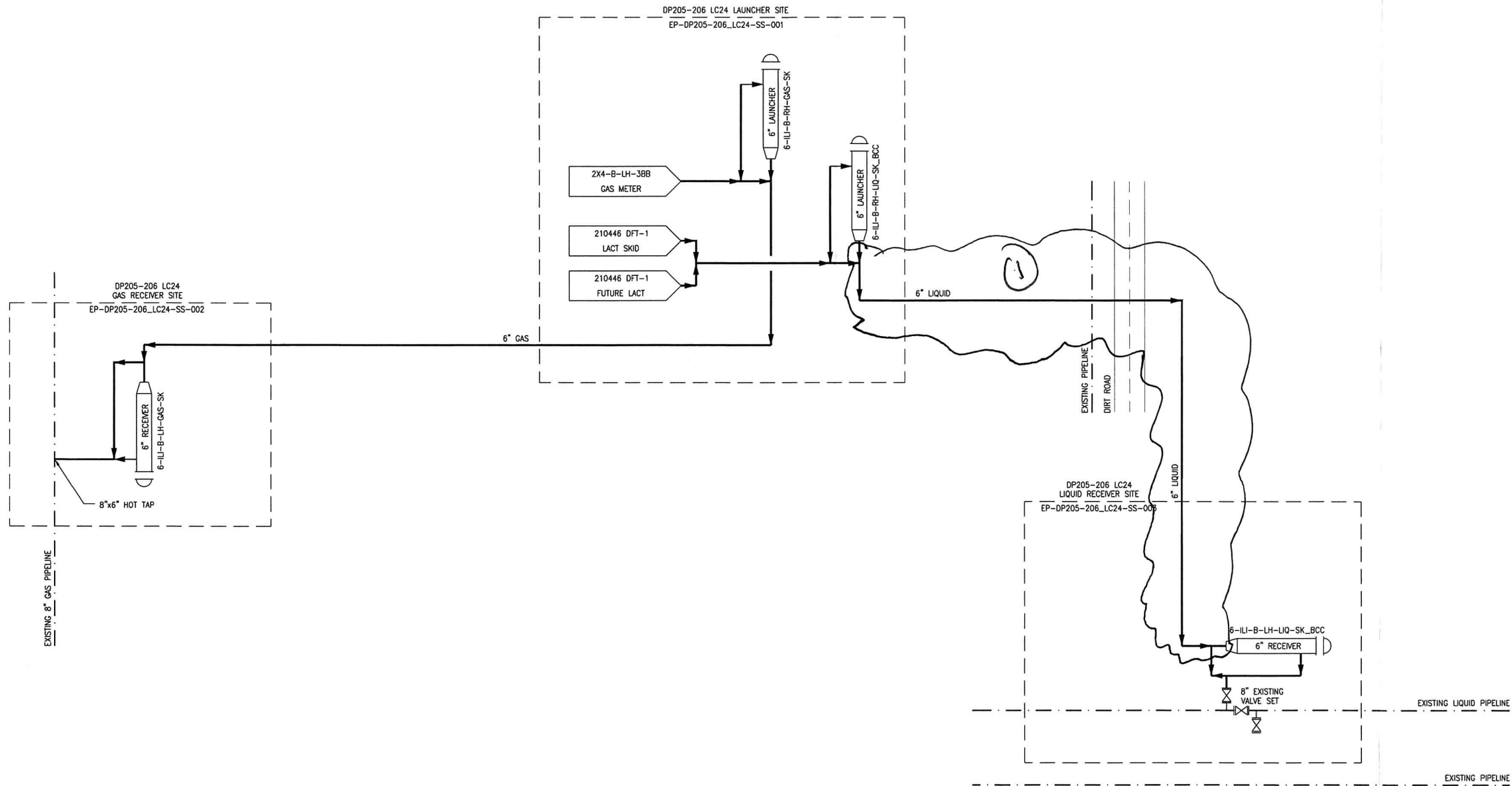
REFERENCE DRAWINGS		REVISIONS								APPROVALS		<div><div>noble MIDSTREAM PARTNERS</div></div> <div>EAST PONY GATHERING SYSTEM DP205-206 LC24 LAUNCHER SITE LIQUID LAUNCHER AREA PIPING PLAN</div>	
		▲								SIGNATURE	DATE		
		▲											
		▲								CHECKED			
		▲								APPROVED			
		▲								CLIENT APPROVAL			
		▲								SIGNATURE	DATE		
		▲								OPERATIONS			
		▲								ENGINEERING			
		▲								PROJ. MGR.			
210446 DFT-1	LACT SKID	0	ISSUED FOR CONSTRUCTION	DRI	16-MAR-2017	DAN	16-MAR-2017						
6-II-B-RH-LD-SK_BCC	6" CL 300 IJI RH LIQUID LAUNCHER & RECEIVER												
EP-DP205-206_LC24-SS-001	ISOMETRIC, CUT LENGTHS & BOM (5 OF 5)												
EP-DP205-206_LC24-SS-001	SECTIONS (4 OF 5)												
EP-DP205-206_LC24-SS-001	PLOT PLAN (1 OF 5)												
DWG NO.	DESCRIPTION	REV	DESCRIPTION	BY	DATE	CHK BY	CHK DATE	APR BY	APR DATE				

SCALE:
AS NOTED

DRAWING:
EP-DP205-206_LC24-SS-001



SHEET No.
3 of 5





KEY

- NEW
- FUTURE
- ADJACENT OR CONNECTING PROJECT
- EXISTING
- SITE LIMITS
- ROAD/HIGHWAY
- RAILROAD
- DITCH/CANAL/RIVER
- BORE LENGTH

REFERENCE DRAWINGS		REVISIONS								APPROVALS			 <div>EAST PONY GATHERING SYSTEM DP205-206 LC24 OPERATIONAL SCHEMATIC</div>		
DWG NO.	DESCRIPTION	REV	ISSUED FOR CONSTRUCTION	DESCRIPTION	BY	DATE	CHK BY	CHK DATE	APR BY	APR DATE	SIGNATURE	DATE			
													DRAWN/DESIGNED		
													CHECKED		
													APPROVED		
													CLIENT APPROVAL		
													SIGNATURE		DATE
OPERATIONS															
ENGINEERING															
PROJ. MGR.															
SCALE:		DRAWING:		SHEET No.		1 of 1									
AS NOTED		EP-DP205-206_LC24-OS-001													