OCD Artesia

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM134086

6. If Indian, Allottee or Tribe Name: N/A Federal

7. If Unit of CA/Agreement, Name and/or No.: NMNM134086

1. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.: Crow Federal Mega Battery

2. Name of Operator: Apache Corporation

9. API Well No.: N/A

3a. Address: 303 Veterans Airpark Lane Midland TX 73705

3b. Phone No. *(include area code)*: (432) 818-1000

10. Field and Pool or Exploratory Area: Fren - Yeso

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*: S-9 T-17S R-31E

11. Country or Parish, State: USA - NM - Eddy

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Apache would like to request a variance for the use of the CPA (Canada Pipeline Accessories) Flow Conditioner 50E at the Crow Federal Mega Battery - Frontier Sales point meter number 06165024.

Please find the requested information on the flow conditioner as noted in the Notice of Incident of Noncompliance Order # AMB150616 for the Crow Federal Mega Battery.

Based on the manufacturer's (attached) recommendation for the use of CPA 50E flow conditioner and the specification of this 6" meter tube the minimum requirement for UL1 (upstream of flow conditioner) is 30" and the minimum requirement for the UL2 (downstream of the flow conditioner) is 48". After verifying the distances and specifications with Frontier's gas measurement supervisor on the meter tube in question (SN: 12311289); it was found that the UL1 and UL2 exceeds the manufacture's minimum requirements with the existing distances of UL1 equaling 44" and UL2 equaling 62". Please find the attached information, photo and specifications provided by Frontier and CPA Computational Solutions the manufacturer of the CPA 50E flow conditioner which support these findings.

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 18 2015
RECEIVED

Accepted for record
NMOCD 8/18/15

APPROVED
AUG 11 2015
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*: David Cole

Title: Gas Measurement Supervisor

Signature: Dave Cole

Date: 07/16/2015

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

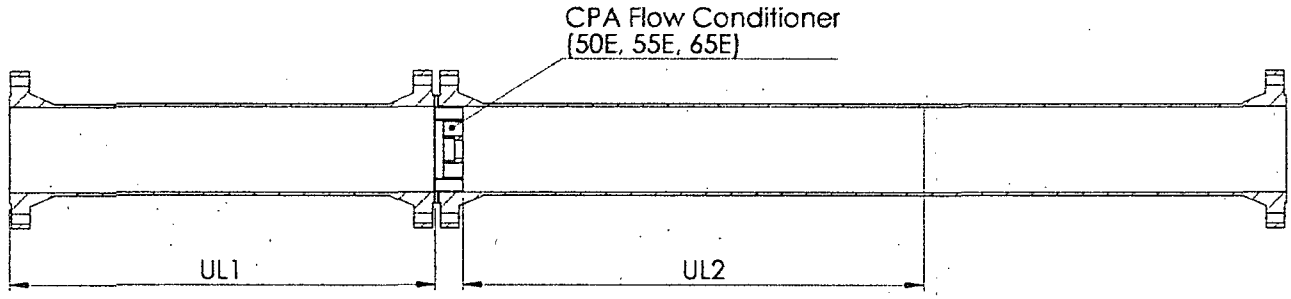
(Instructions on page 2)

CANADA PIPELINE ACCESSORIES

CPA COMPUTATIONAL SOLUTIONS LTD.

CPA Meter Run Recommendations

Dimensions are minimums; any combination of UL1 & UL2 longer than listed is acceptable. For more information or to discuss meter run lengths, please contact CPA!



CPA 55E/65E Ultrasonic Flow Meter Installations, Gas or Liquid

- Canada Pipeline Accessories' minimum general recommended meter run length is **10 internal pipe diameters** when using the **CPA 55E and 65E** in ultrasonic applications.
- For UL1, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe as measured from the **upstream face (inlet)** of the flow conditioner.
- For UL2, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe from the **downstream face (outlet)** of the flow conditioner to the upstream flange of the ultrasonic meter.

CPA TBR/50E/55E AGA3-2000/ISO-5167 Installations, Gas or Liquid

- For all AGA3-2000/ISO-5167 custody transfer orifice measurement applications, CPA recommends a minimum meter run length of 13D or 17D for the CPA TBR/50E and 13D for the CPA 55E.
- For 13D installations, a minimum UL1 upstream length of **5 internal diameters** and a minimum UL2 downstream length of **8 internal diameters** is required.
- For 17D installations, any combination of UL1 and UL2 is acceptable as long as UL2 is a minimum of **8 internal pipe diameters,** and the total overall meter run length is at least **17 internal diameters.**
- UL1 is measured from the last disturbance to the upstream face of the flow conditioner.
- UL2 is measured from the outlet of the flow conditioner to the upstream face of the orifice plate.
- This is independent of fluid type and is recommended for all gas or liquid applications.

CPA 65E Gas/Liquid Flow Meter General Installations

- Canada Pipeline Accessories' minimum recommended meter run length is **10 internal pipe diameters.**
- This is applicable to all flow meters (turbine, ultrasonic, vortex, annubar, venturi) as these distances were determined independently of any specific meter type.
- For UL1, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe as measured from the **upstream face (inlet)** of the flow conditioner.
- For UL2, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe from the **downstream face (outlet)** of the flow conditioner to the flow meter in question.
- For turbine, ultrasonic or any other flanged meters, UL2 is measured to the flange connection at the flow meter inlet.
- For venturi meters, UL2 is measured to venturi inlet or upstream tap (a venturi calibration is recommended to maximize performance of the flow meter).
- The 65E is not recommended for AGA3 orifice applications!

CANADA PIPELINE ACCESSORIES

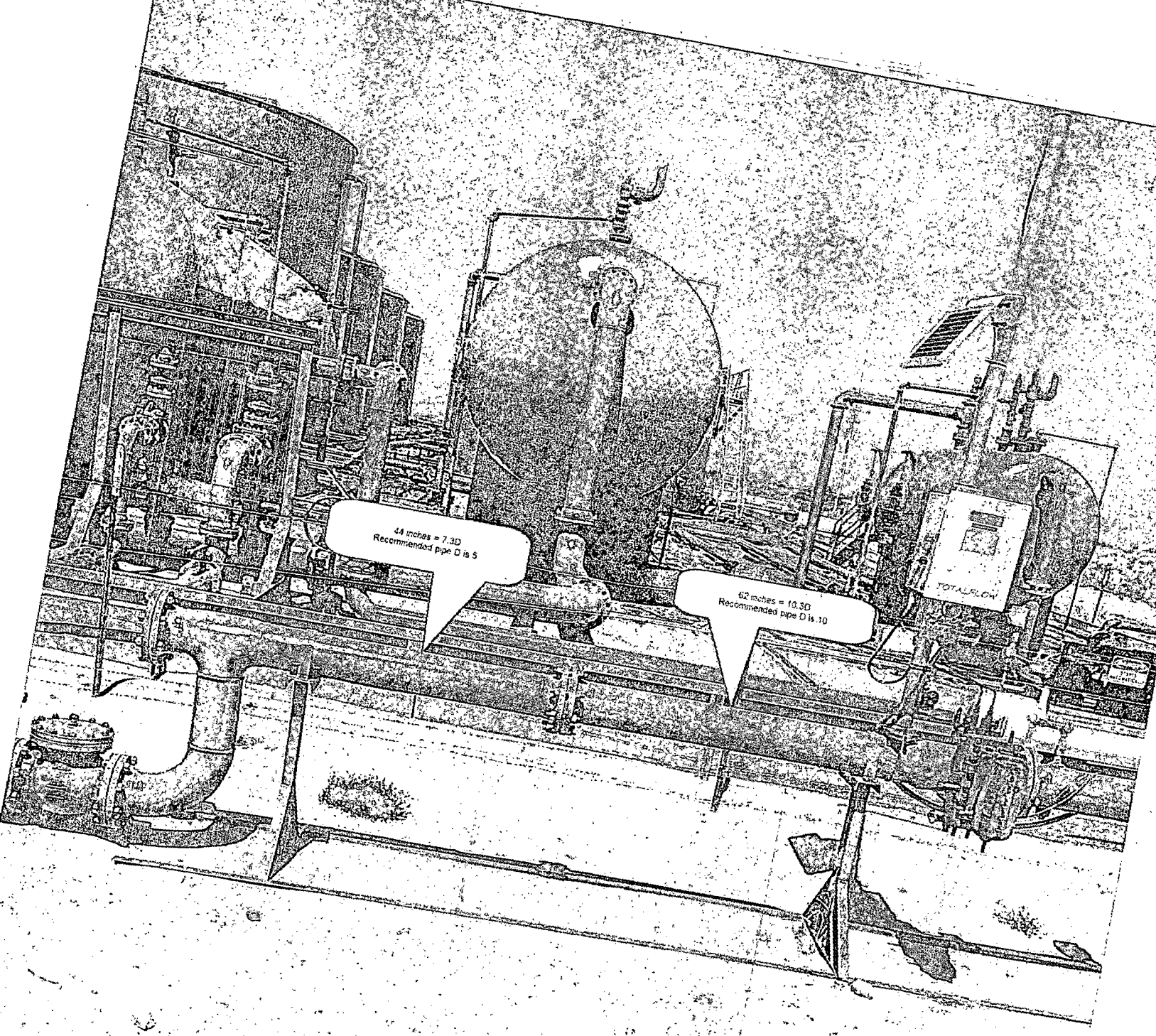
CPA COMPUTATIONAL SOLUTIONS LTD.

CPA 55E Gas Flow Meter General Installations

- Canada Pipeline Accessories' minimum recommended meter run length is **10 internal pipe diameters**.
- This is applicable to all flow meters (turbine, ultrasonic, vortex, annubar, venturi) as these distances were determined independently of any specific meter type.
- For UL1, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe as measured from the **upstream face (inlet)** of the flow conditioner.
- For UL2, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe from the **downstream face (outlet)** of the flow conditioner to the flow meter in question.
- For turbine, ultrasonic or any other flanged meters, UL2 is measured to the flange connection at the flow meter inlet.
- For venturi meters, UL2 is measured to venturi inlet or upstream tap (a venturi calibration is recommended to maximize performance of the flow meter).

CPA 50E Gas Flow Meter General Installation

- Canada Pipeline Accessories' minimum recommended meter run length is **13 internal pipe diameters**.
- This is applicable to all flow meters (orifice; turbine, ultrasonic, vortex, annubar, venturi) as these distances were determined independently of any specific meter type.
- For UL1, CPA recommends a minimum of **5 internal diameters** of uninterrupted straight pipe as measured from the **upstream face (inlet)** of the flow conditioner.
- For UL2, CPA recommends a minimum of **8 internal diameters** of uninterrupted straight pipe from the **downstream face (outlet)** of the flow conditioner to the flow meter in question.
- For orifice meters, UL2 is measured to the upstream face of the orifice plate.
- For turbine, ultrasonic or any other flanged meters, UL2 is measured to the flange connection at the flow meter inlet.
- For venturi meters, UL2 is measured to venturi inlet or upstream tap (a venturi calibration is recommended to maximize performance of the flow meter)


44 inches = 7.3D
Recommended pipe D is 5
62 inches = 10.3D
Recommended pipe D is 10

Fernandez, Edward <efernand@blm.gov>

Crow Mega Battery

2 messages

Maxwell, Craig <Craig.Maxwell@apachecorp.com> Mon, Aug 10, 2015 at 4:04 PM
To: "efernand@blm.gov" <efernand@blm.gov>
Cc: "Cole, David" <David.Cole@apachecorp.com>, "Maxwell, Craig" <Craig.Maxwell@apachecorp.com>

This is a list of all the wells going into the crow mega battery. Do you need a API number for each well?

Thanks

CROW FEDERAL # 1
CROW FEDERAL # 10H, 11H, 12H, 13H, 14H, 15H, 16H, 17H, 18H, 19H, 20H, 22H, 23H, 24H, 25H, 26H, 35H, 37H, 40H, 41H, 42H, 43H
CROW FEDERAL # 34H, 36H