



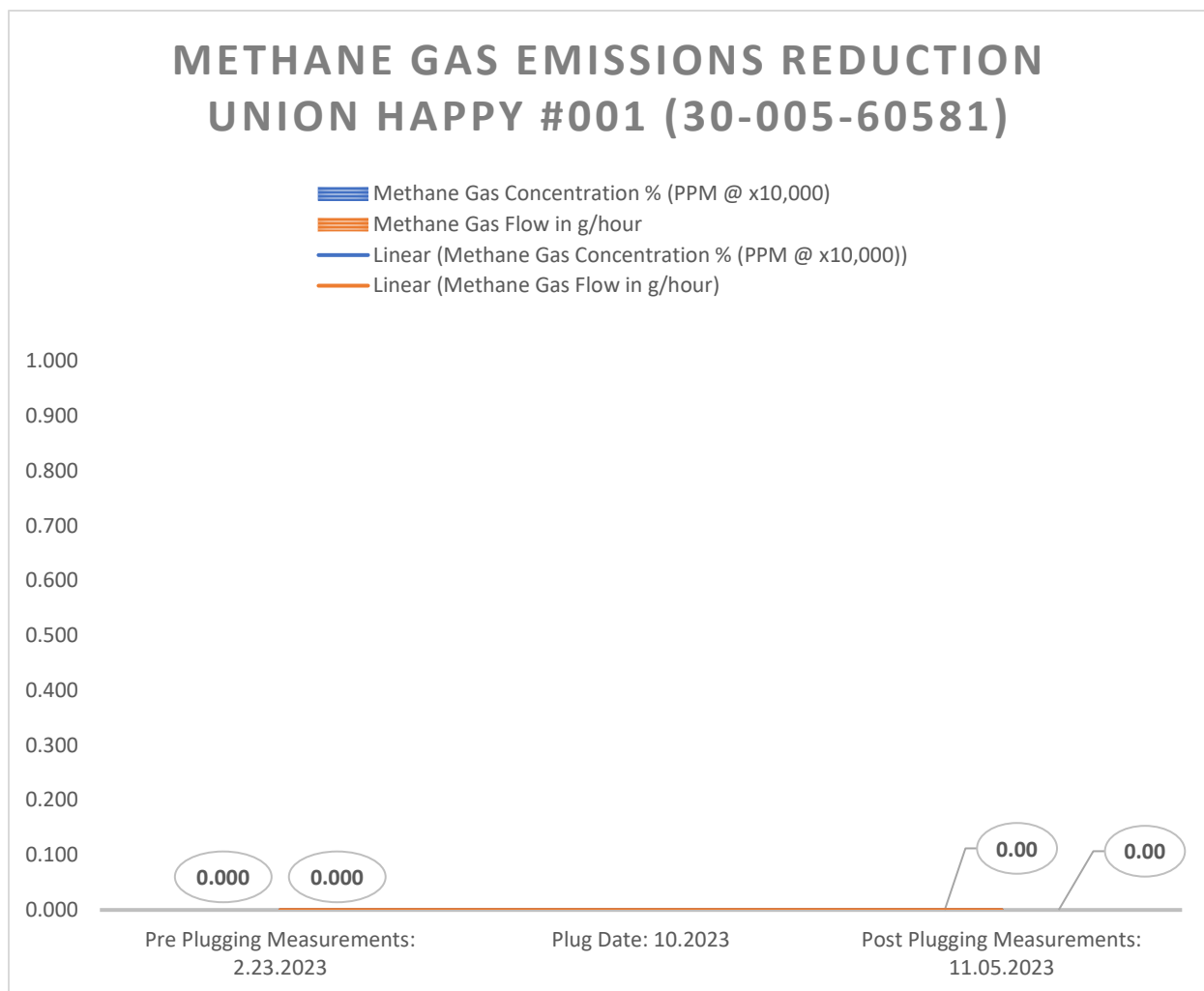
333 Main Street Shelby, Montana 59474 / P.O. Box 10640 Bozeman, MT 59179

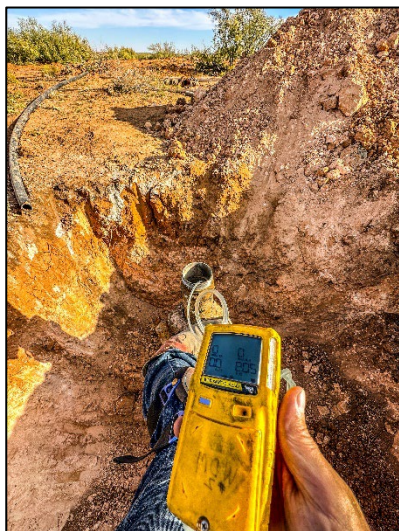
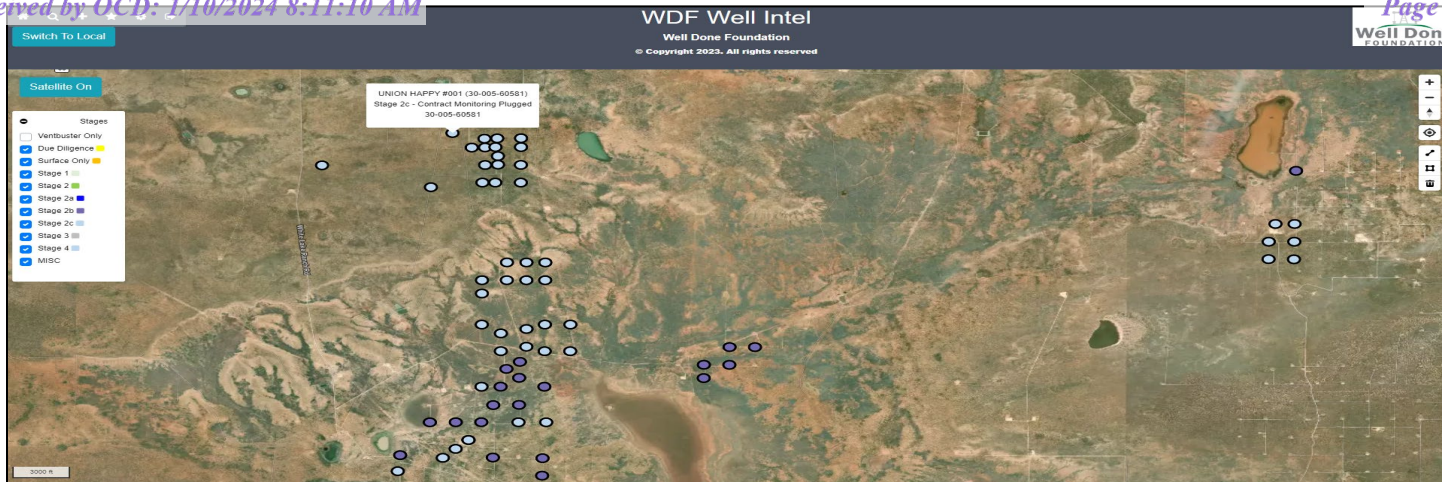
(406) 460-0903

TO: Jim Griswold, OCD
FROM: Curtis Shuck, WDNM
DATE: December 31, 2023
RE: Union Happy #001 (30-005-60581) Post Plugging Methane Emission Reduction Report

MEMORANDUM

Well Done New Mexico LLC performed Post Plugging Orphan Well Methane Emission Testing, Gas Sampling & Analysis on the Union Happy #001 (30-005-60581) on November 5, 2023. The following are the conclusions:





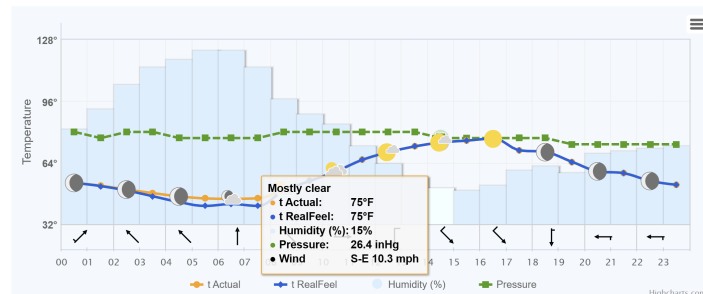
www.permianis.com
575.397.3713 2603 W Marland Hobbs NM 88240

C6+ Gas Analysis Report November 05, 2023

15556G	Union Happy #001 Post Plug	Union Happy #001
Sample Point Code	Sample Point Name	Sample Point Location
Laboratory Services	2023078641	NA
Source Laboratory	Lab File No	Container Identity
USA	USA	USA
District	Area Name	Field Name
Nov 5, 2023 15:00	Nov 5, 2023 15:00	Nov 6, 2023 10:45
Date Sampled	Date Effective	Date Received
	Admin	
Ambient Temp (°F)	Flow Rate (McF)	Analyst
		Press PSI @ Temp °F
		Source Conditions
Well Done Foundation		NG
Operator		Lab Source Description

	Atmospheric conditions and temperature °F	RealFeel °F	Atmospheric pressure inHg	Wind speed mph	Humidity
Night	☾ +52°	+52°	26.4	▼ N 6.3	47%
Morning	☀ +45°	+41°	26.4	▲ NW 4.3	64%
Day	☀ +73°	+73°	26.5	▼ SE 7.2	19%
Evening	☾ +64°	+64°	26.3	▼ SW 5.1	21%

Hourly forecast for 05.11.2023



Component	Normalized Mol %	Un-Normalized Mol %	GPM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	99.7940	99.79372	
CO2 (CO2)	0.0000	0	
Methane (C1)	0.0000	0	
Ethane (C2)	0.0000	0	0.0000
Propane (C3)	0.0000	0	0.0000
I-Butane (IC4)	0.0000	0	0.0000
N-Butane (NC4)	0.0000	0	0.0000
I-Pentane (IC5)	0.0000	0	0.0000
N-Pentane (NC5)	0.0000	0	0.0000
Hexanes Plus (C6+)	0.2060	0.20628	0.0890
TOTAL	100.0000	100.0000	0.0890

Gross Heating Values (Real, BTU/ft³)			
14.696 PSI @ 60.00 °F	14.73 PSI @ 60.00 °F		
Dry	Saturated	Dry	Saturated
10.6	11.3	10.6	11.3
Calculated Total Sample Properties			
GPA2145-16 *Calculated at Contract Conditions			
Relative Density Real	0.9717	Relative Density Ideal	0.9718
Molecular Weight	28.1477		
C6+ Group Properties			
Assumed Composition			
C6 - 60.000%	C7 - 30.000%	C8 - 10.000%	
Field H2S			
0 PPM			

PROTREND STATUS:
Passed By Validator on Nov 22, 2023

DATA SOURCE:
Imported

PASSED BY VALIDATOR REASON:
Close enough to be considered reasonable.

VALIDATOR:
Ashley Russell

VALIDATOR COMMENTS:
OK

Method(s): Gas C6+ - GPA 2261, Extended Gas - GPA 2286, Calculations - GPA 2172

Analyzer Information			
Device Type:	Gas Chromatograph	Device Make:	Shimadzu
Device Model:	GC-2014	Last Cal Date:	Nov 20, 2023



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District	Area Name	Field Name
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Ambient Temp (°F)	Flow Rate (Mcf)	Press PSI @ Temp °F
		Source Conditions
Well Done Foundation		NG
Operator		Lab Source Description

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Propane (C3)	0.0000	0	0.0000
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N-Butane (NC4)	0.0000	0	0.0000
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C6 - 60.000%	C7 - 30.000%	C8 - 10.000%

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0 PPM

PROTREND STATUS: Passed By Validator on Nov 22, 2023
DATA SOURCE: Imported

PASSED BY VALIDATOR REASON:
 Close enough to be considered reasonable.

VALIDATOR:
 Ashley Russell

VALIDATOR COMMENTS:
 OK

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

DEFINITIONS

Action 301952

DEFINITIONS

Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 301952
	Action Type: [UF-OMA] Post-Plug Methane Monitoring (UF-OMA-MMB)

DEFINITIONS

The Orphan Well Mitigation Activity (OMA) forms are a subset of the OCD's forms exclusively designed for activities related to State of New Mexico's contracted plugging and reclamation activities. Specifically, these forms are used for orphan wells or associated facilities which are in a "Reclamation Fund Approved" status. This status represents wells or facilities where the OCD has acquired a hearing order allowing the OCD to perform plugging or reclamation on wells and associated facilities that no longer have a viable operator to perform the necessary work. These forms are not to be utilized for any other purpose.

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QUESTIONS

Action 301952

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Operator: CANYON E & P COMPANY 251 O'Connor Ridge Blvd. Irving, TX 75038	OGRID: 269864
	Action Number: 301952
	Action Type: [UF-OMA] Post-Plug Methane Monitoring (UF-OMA-MMB)

QUESTIONS

Prerequisites	
[OGRID] Well Operator	[269864] CANYON E & P COMPANY
[API] Well Name and Number	[30-005-60581] UNION HAPPY #001
Well Status	Plugged (not released)

Monitoring Event Information	
Please answer all the questions in this group.	
Reason For Filing	Post-Plug Methane Monitoring
Date of monitoring	11/05/2023
Latitude	33.64377
Longitude	-104.03888

Monitoring Event Details	
Please answer all the questions in this group.	
Flow rate in cubic meters per day (m³/day)	0.00
Test duration in hours (hr)	1.0
Average flow temperature in degrees Celsius (°C)	23.1
Average gauge flow pressure in kilopascals (kPag)	0.0
Methane concentration in part per million (ppm)	0
Methane emission rate in grams per hour (g/hr)	0.00
Testing Method	Steady State

Monitoring Contractor	
Please answer all the questions in this group.	
Name of monitoring contractor	Well Done New Mexico LLC