<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210	State of New Mexico Submit Or   Energy, Minerals and Natural Resources Department to Appro District (	riginal opriate Office						
District III 1000 Rio Brazos Road, Aztec, NM 87410	Oil Conservation Division							
District IV	1220 South St. Francis Dr.							
1220 S. St. Francis Dr., Santa Fe, NM 999	Santa Fe, NM 87505							
JAN 16 LUITE PLAN								
X Original	Operator & OGRID No.: <u>Matador Production Company (228937)</u>							
□ Amended	Date: <u>5/15/18</u>							
Reason for Amendment:								

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: A C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule 19.15.18.12.A

# Well(s)/Production Facility - Name of facility

The wells that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Brad Lummis Fed Com #121H <b>30-0</b>	N/A P <b>25-4</b>	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-1500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Brad Lummis Fed Com #131H	N/A	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-1500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Brad Lummis Fed Com #201H	N/A	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-1500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Brad Lummis Fed Com #211H	N/A	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-900	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Brad Lummis Fed Com #215H	N/A	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-1500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup

# **Closed-Loop System**

# **Operating and Maintenance Plan:**

During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluids and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

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#### **Closure Plan:**

During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.

Brad Lummis Com #221H	Fed	N/A	UL-D Sec 23 T24S R34E	### FNL ### FWL	+/-1500	days	Flare ~30 days on flowback before turn into TB. Time est. depends
							on sales connect and well cleanup

# **Gathering System and Pipeline Notification**

The wells will be connected to a production facility after flowback operations are complete so long as the gas transporter system is in place. The gas produced from the production facility should be connected to either a Versado or Lucid Energy Delaware, LLC gathering system. It will require ~3,000' of pipeline to connect the facility to either the Versado or Lucid Energy Delaware, LLC gathering system. Matador Production Company periodically provides a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future to Versado and Lucid Energy Delaware, LLC. If changes occur that will affect the drilling and completion schedule, Matador Production Company will notify Versado and Lucid Energy Delaware, LLC. Additionally, the gas produced from the well will be processed at a processing plant further downstream and, although unanticipated, any issues with downstream facilities could cause flaring at the wellhead. The actual flow of the gas will be based on compression operating parameters and gathering system pressures measured when the well starts producing.

## Flowback Strategy

After the fracture treatment/completion operations (flowback), the well will be produced to temporary production tanks and the gas will be flared or vented. During flowback, the fluids and sand content will be monitored. If the produced fluids contain minimal sand, then the well will be turned to production facilities. The gas sales should start as soon as the well starts flowing through the production facilities, unless there are operational issues on the midstream system at that time. Based on current information, it is Matador's belief the system will be able to take the gas upon completion of the well.

Safety requirements during cleanout operations may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

## **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Operating a generator will only utilize a portion of the produced gas and the remainder of gas would still need to be flared.
  - Power Company has to be willing to purchase gas back and if they are willing they require a 5 year commitment to supply the agreed upon amount of power back to them. With gas decline rates and unpredictability of markets it is impossible to agree to such long term demands. If the demands are not met then operator is burdened with penalty for not delivering.
  - Compressed Natural Gas On lease
    - o Compressed Natural Gas is likely to be uneconomic to operate when the gas volume declines.
  - NGL Removal On lease
    - NGL Removal requires a plant and is expensive on such a small scale rendering it uneconomic and still requires residue gas to be flared.

Drilling Operations Plan Brad Lummis Fed Com #121H Matador Resources Company Sec. 23, 24S, 34E Lea County, NM Surface Location: 441' FNL & 543' FWL, Sec. 23 Bottom Hole Location: 240' FSL & 660' FWL, Sec. 23 Elevation Above Sea Level: 3492'

Geologic Name of Surface Formation: Delaware

Type of Well: Horizontal well, No Pilot Hole, Drilled with conventional rotary tools

Proposed Drilling Depth: 15,865' MD / 11,100' TVD

Estimated Tops of Geological Markers w/ Mineral Bearing Formation:

Formation Name	Est Top	Bearing
Rustler	1103	Water
Top of Salt	1568	Barren
Castile	3792	Barren
Base of Salt	5370	Barren
Bell Canyon	5413	Hydrocarbon
Cherry Canyon	6565	Hydrocarbon
Brushy Canyon	7765	Hydrocarbon
Bone Spring Lime	9249	Hydrocarbon
1st Bone Spring Carbonate	9973	Hydrocarbon
1st Bone Spring Sand	10337	Hydrocarbon
2nd Bone Spring Carbonate	10581	Hydrocarbon
2nd Bone Spring Sand	10925	Hydrocarbon
3rd Bone Spring Carbonate	11300	Hydrocarbon
3rd Bone Spring Sand	12026	Hydrocarbon
Wolfcamp A	12122	Hydrocarbon

OSE Ground Water Estimated Depth: 175'

Casing Program

Name	Hole Size	Casing Size	Wt/Grad e	Thread Collar	Settin g Depth	Top Cement
			54.5# J-			
Surface	17-1/2"	13-3/8" (new)	55	BTC	1150	Surface
Intermediat						
е	12-1/4"	9-5/8" (new)	40# J-55	BTC	5400	Surface
			20# P-	Vam DWC/C-IS HT		
Production	8-3/4"	5-1/2" (new)	110	Plus	15,865	4400

Minimum Safety Factors: Bu

Burst: 1.125

Collapse: 1.125

Tension 1.8