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District III  
1000 Rio Brazos Road, Aztec, NM 87401  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original  
to Appropriate  
District Office

NM OIL CONSERVATION  
DISTRICT  
JUN 27 2018

Date: 10/17/17

GAS CAPTURE PLAN

☒ Original

Operator & OGRID No.: Cimarex Energy Co- 215099

☐ Amended - 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, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

**Well(s)/Production Facility – Name of facility**

The well(s) 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
Foxx 31 Federal Com #1H	Pending	31-26S-27E	525 FNL& 270 FEL	3500		
30-015-45039						

**Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Gas Transporter and will be connected to Gas Transporter low/high pressure gathering system located in Culberson County, Texas. It will require 0 ' of pipeline to connect the facility to low/high pressure gathering system. Operator provides (periodically) to Gas Transporter a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Operator and Gas Transporter have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Gas Transporter Processing Plant located in Sec. 23 Block 60-T2, T&P Survey, Culberson County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

**Flowback Strategy**

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

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems 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**

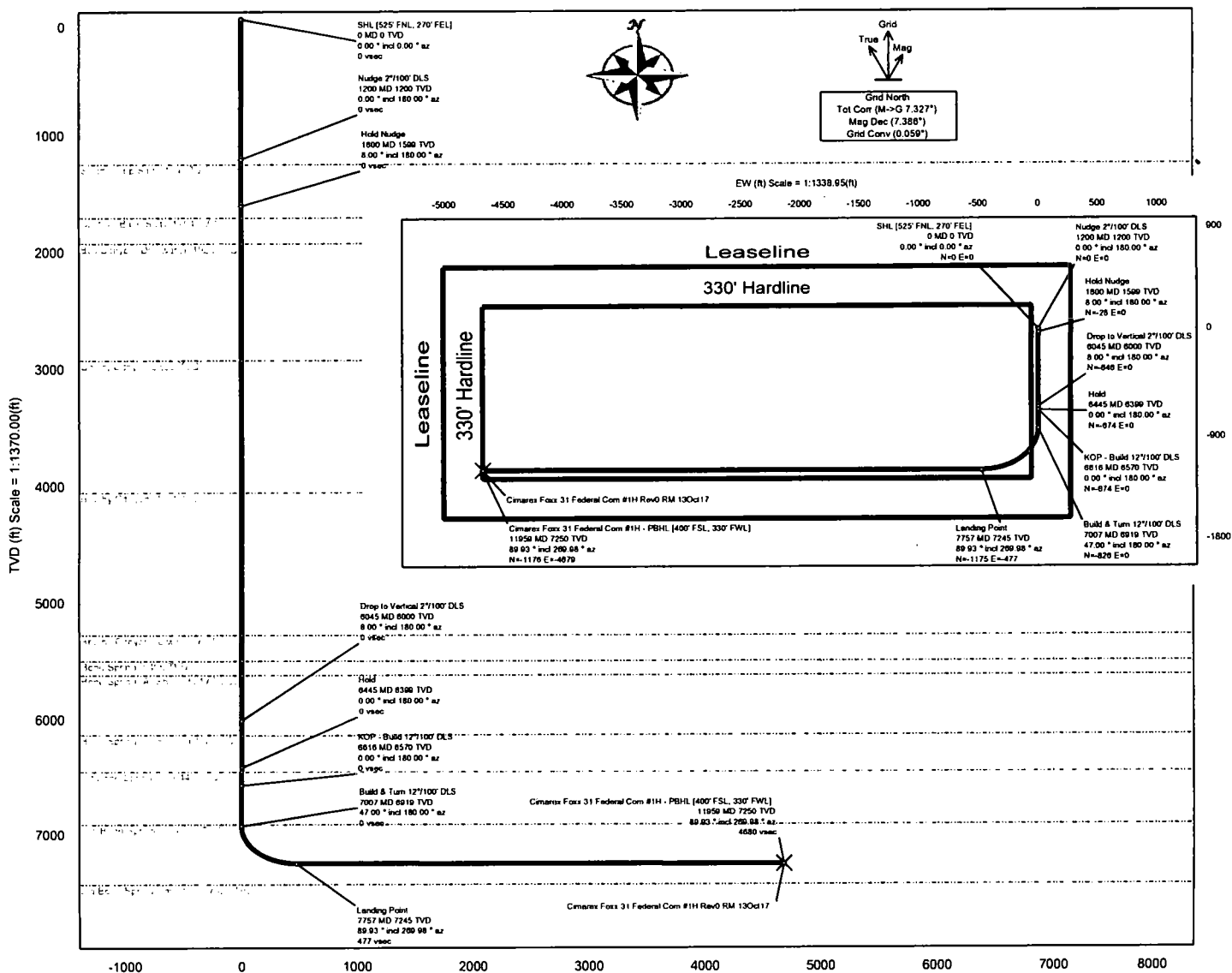
Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Borehole:	Well:	Field:	Structure:
Original Borehole	Foxx 31 Federal Com #1H	NM Eddy County (NAD 83)	Cimarex Foxx 31 Federal Com #1H

Gravity & Magnetic Parameters				Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	HDOM 2017	Dip:	58.852°	Date:	13-Oct-2017	Lat:	N 32 0 15.72	Northing:	385348.27RUS	Grid Conv:	0.0584°
MagDec:	7.380°	FS:	47913.83nT	Gravity FS:	998.432mgal (9.80665 Based)	Lon:	W 104 13 18.44	Easting:	576885.62RUS	Scale Fact:	0.99991047
								Shot: Foxx 31 Federal Com #1H			
								Plan: Cimarex Foxx 31 Federal Com #1H Rev0 RM 13Oct17			
								TYD Ref: RKB(3233R above MSL)			



Vertical Section (ft) Azim = 269.98° Scale = 1:1370.00(ft) Origin = 0N/-S, 0E/-W

Critical Point	MD	INCL	AZIM	Critical Points					DLS
				TVD	VSEC	N(+)/S(-)	E(+)/W(-)		
SHL (525' FNL, 270' FEL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Nudge 2"/100' DLS	1200.00	0.00	180.00	1200.00	0.00	0.00	0.00	0.00	
Salado (Top Salt)	1245.00	0.90	180.00	1245.00	0.00	-0.35	0.00	2.00	
Hold Nudge	1600.00	8.00	180.00	1598.70	0.01	-27.88	0.00	2.00	
Castile (Base Salt)	1706.33	8.00	180.00	1704.00	0.01	-42.68	0.00	0.00	
Bell Canyon (Delaware)	1929.51	8.00	180.00	1925.00	0.03	-73.74	0.00	0.00	
Cherry Canyon	2936.30	8.00	180.00	2922.00	0.07	-213.86	0.00	0.00	
Brushy Canyon	4076.40	8.00	180.00	4051.00	0.13	-372.53	0.00	0.00	
Brushy Canyon Lower	5312.43	8.00	180.00	5275.00	0.19	-544.55	0.00	0.00	
Bone Spring	5534.59	8.00	180.00	5495.00	0.20	-575.47	0.00	0.00	
Bone Spring "A" Shale	5657.79	8.00	180.00	5617.00	0.21	-592.61	0.00	0.00	
Drop to Vertical 2"/100' DLS	6044.55	8.00	180.00	6000.00	0.23	-846.44	0.00	0.00	
Bone Spring "C" Shale	6171.44	5.46	180.00	6126.00	0.23	-661.31	0.00	2.00	
Hold	6444.55	0.00	180.00	6398.70	0.24	-674.32	0.00	2.00	
1st Bone Spring Ss	6490.85	0.00	180.00	6445.00	0.24	-674.32	0.00	0.00	
KOP - Build 12"/100' DLS	6615.80	0.00	180.00	6569.95	0.24	-674.32	0.00	0.00	
2nd Bone Spring Ss	6990.00	44.90	180.00	6907.00	0.28	-813.60	0.00	12.00	
Build & Turn 12"/100' DLS	7007.47	47.00	180.00	6919.15	0.29	-826.16	0.00	12.00	
Landing Point	7756.97	89.93	269.98	7245.00	477.38	-1175.14	-476.97	12.00	
Cimarex Foxx 31 Federal Com #1H - PBHL (400' FSL, 330' FWL)	11959.37	89.93	269.98	7250.00	4679.78	-1176.48	-4679.37	0.00	
3rd Bone Spring Limestone	NaN			7429.00					