<u>District I</u> 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**

Form C-101 August 1, 2011

Permit 340961

			APPLICA	ATION FOR PERMI	T TO DRILL,	RE-	ENTER, DEEPEN	I, PLUGBACK	K, OR ADD	A ZONI	E		
1. Operato		and Address	0							2. OGRID			
		EXPLORATION, lox 890	LLC							256512 3. API Number			
	Snyde	er, TX 79550								0.74.114	30-025-51529		
4. Propert	y Code 33407	70		5. Property Name IVY 4 STATE						6. Well No.			
					7.	Surf	ace Location						
UL - Lot		Section	Township	Range	Lot Idn		Feet From	N/S Line	Feet From		E/W Line	County	
	G	4	178	33E	G	}	2105	N	1	670	E		Lea
					8. Propos	sed B	ottom Hole Location	l					
UL - Lot		Section	Township	Range	Lot Idn		Feet From	N/S Line	Feet From		E/W Line	County	
	G	4	178	33E	G	}	2105	N	1	670	E		Lea
				·			·						

9. Pool Information

	SANMAL;PENN		54340
--	-------------	--	-------

Additional Well Information

11. Work Type 12. Well Type		13. Cable/Rotary 14. Lease Type 15		15. Ground Level Elevation	
New Well	OIL		State	4177	
16. Multiple 17. Proposed Depth		18. Formation 19. Contractor		20. Spud Date	
N	12000	Pennsylvanian		8/1/2023	
Depth to Ground water		Distance from nearest fresh water well	Distance to nearest surface water		

☑ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type Hole Size Casing Size		Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC	
Surf	17.5	13.375	54.5	1500	1200	0
Int1	12.25	9.625	36	3300	1000	0
Prod	8.75	5.5	17	12000	1000	2000

Casing/Cement Program: Additional Comments

	22. Proposed Blowout Prevention Program									

Туре	Working Pressure	Test Pressure	Manufacturer	
Annular	5000	2500	Schaffer	
Double Ram	5000	5000	Schaffer	

knowledge and be				OIL CONSERVATION	ON DIVISION	
Signature:						
Printed Name: Electronically filed by Paula D Barbee			Approved By:	Paul F Kautz		
Title: Production Analyst			Title:	Geologist		
Email Address: barbeep@cmlexp.com			Approved Date:	5/26/2023 Expiration Date: 5/26/2025		
Date: 5/24/2023 Phone: 325-573-0750			Conditions of Appr	oval Attached		

Received by OCD: 5/26/2023 10:58:22 AM

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BILS First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department **OIL CONSERVATION DIVISION** 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

□AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

A		43	43270 Maljamar; Cisco					7				
Property C	ode			Property Name						Well Number		
					IVY 4 STA	ME				l		
OGRID i				•	Operator Nam				E	Elevation		
25651			CML I	EXPLORA	TION, LLC				4177'			
					Surface Locat	ion						
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County		
G	4	17-S	33-E		2105	NORTH	1670	E	AST	LEA		
				Bottom Hol	e Location If Diffe	erent From Surface						
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line		County		
Dedicated Acres Joint or Infill Consolidation Code Order No.							·-					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=679062.8 N X=705346.1 E LAT.=32.865039' N LONG.=103.664567' W	GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION Y=679127.8 N X=746524.2 E LAT.=32.865159' N LONG.=103.665070' W	2105	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
		S.L.O-1670'	Signature Nolan von Roeder Printed Name Vonroedern ecmlexp. Carroeders E-mail Address
			SURVEYOR CERTIFICATION I hereby certify that the wall location shown on this plat was plotted from licid poor organism was made by me or under my substitution, and that was plotted and correction best of my peter. MY 2, 2023 Date of Survey 12641 Signature 2 Seal of Professional Surveyor
			Certificate Number Gary G. Eidson 12641 Ronald J. Eidson 3239 ACK JWSC W O. 23.11.0139

Form APD Conditions

Permit 340961

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

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
CML EXPLORATION, LLC [256512]	30-025-51529
P.O. Box 890	Well:
Snyder, TX 79550	IVY 4 STATE #001

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	MUST SUBMIT A DEVIATION SURVEY WITH C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: _CML EXPLORATION, LLC_____ OGRID: _256512_____ Date: __05/22/2023_

II. Type: ☐ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please descr	ribe:					-	
III. Well(s): Provide be recompleted from					ll or set of wells p	proposed to be dri	lled or proposed to
Well Name	API	ULSTR	Footages		Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Ivy 4 State No. 1	30-025-	G-04-17S-33E	2105'FNL&1670	FEL	200	200	20
V. Anticipated Sche proposed to be recon Well Name		_	connected to a cent	ral deliv	•	Initial Flow Back Date	First Production Date
Ivy 4 State No. 1	30-025-	08/01/2023	08/22/2023	09/11	/2023	09/15/2023	09/18/2023
VI. Separation Equ VII. Operational P. Subsection A throug VIII. Best Manager during active and pla	ractices: A th F of 19,15.27 ment Practices	attach a complete d 7.8 NMAC.	description of the ac	ctions C	Dperator will take	to comply with t	the requirements of

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☑ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

- **XI.** Map. \square Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.
- XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.
- XIII. Line Pressure. Operator \square does \square does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).
- ☐ Attach Operator's plan to manage production in response to the increased line pressure.
- XIV. Confidentiality:
 Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

one hundred percent	able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, he current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of t into account the curr	be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one ne anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking ent and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. his box, Operator will select one of the following:
Well Shut-In. □ Op D of 19.15.27.9 NM	erator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection AC; or
_	g Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential uses for the natural gas until a natural gas gathering system is available, including:
(a)	power generation on lease;
(b	power generation for grid;
(c)	·
(d	· · · · · · · · · · · · · · · · · · ·
(e)	
(f)	· · · · · · · · · · · · · · · · · · ·
(a)	reinjection for enhanced oil recovery:

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

fuel cell production; and

(h)

(i)

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Nolan von Roeder
Title: Engineer
E-mail Address: vonroedern@cmlexp.com
Date: 05/22/2023
Phone: 325-574-6295
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

CML EXPLORATION, LLC

NATURAL GAS MANAGEMENT PLAN - Supplemental

VI. Separation Equipment: Description of how CML Exploration, LLC will size separation equipment to optimize gas capture.

- Separation equipment will be designed to provide adequate separation of oil, gas and water for more than the anticipated rates and pressures.
- Separation equipment will be sized to allow for adequate retention time to separate all
 (3) phases of the well stream.

VII. Operational Practices: Description of the actions CML Exploration, LLC will take to comply with the requirements of Subsections A through F of rule 19.15.27.8 NMAC.

Drilling Operations A&B:

- All flare stacks and mud/gas separators used while drilling will be properly sized. The flare stack will be located at a minimum of 100' from the nearest wellbore and will have an automated ignitor.
- Drilling mud used during drilling operations will be properly weighted and maintained to
 prevent gas from entering the wellbore so that gas to be flared will minimized, if not
 eliminated. Mud weight will be determined based on anticipated bottomhole pressures in
 the area.
- All natural gas produced during drilling operations will be flared when technically
 possible, unless there is an equipment malfunction and by doing so would pose a risk to
 safe operations or personnel safety, at which point the gas will be vented.

Completion Operations C:

- During initial flowback, the well stream will be routed to temporary separation equipment and the natural gas brought to surface will be temporarily flared.
- Immediately following the initial flowback period, once the sand, mud and other debris have cleaned up, the well stream will be diverted into the permanent gathering system. Produced natural gas will then be sent to sales.
- If for some reason the natural gas does not meet gathering pipeline specifications, it will be flared through a properly sized flare with an automatic ignitor for no more than 60 days. Gas samples will be taken twice per week and natural gas will be routed into the sales line as soon as the pipeline specifications are met.

Production Operations D:

Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there are
occasions when 100% of the takeaway capacity for the separator gas is not available,
the well or wells will be shut-in until that natural gas gathering system is available, with
the exception of emergency or malfunction situations. Volumes flared will be reported
appropriately.

CML EXPLORATION, LLC

Performance Standards E:

- Production separation equipment and storage tanks will be designed to handle the maximum anticipated throughput and pressure to minimize waste.
- Storage tanks will be equipped with automated gauging systems which will reduce the venting of gas through the thief hatches.
- A flare stack will be installed at least 100' from the well and storage tanks and properly anchored. Flare stack will be properly sized and will have an automatic ignitor.
- Weekly AVO inspections will be performed on all components of the tank battery facility for at least the first year of production and as long as the well is producing 60 MCF/D or more.
- If the gas volume falls below 60 MCF/D or the well is shut -in, AVO inspections will continue on a minimum of once per calendar month schedule.

Measurement F:

- The volume of natural gas that is vented or flared as a result of an emergency or malfunction will be measured through a meter that conforms to API 14.10 whenever possible. Otherwise, it will be estimated and reported accordingly.
- All meters will be calibrated at regular intervals according to the meter manufacturer's recommendations.

VIII. Best Management Practices: A complete description of CML's best management practices to minimize venting gas during active and planned maintenance.

- During downhole well maintenance, CML will use best management practices to vent as minimally as possible by utilizing blowout preventors and kill fluids to prevent gas from escaping the wellbore.
- During surface facility maintenance, all valves upstream of the equipment requiring maintenance will be closed and isolated. The well will be shut-in if necessary, depending on the nature of the maintenance.
- The tank, vessel or compressor will be isolated and depressurized to as low a pressure
 as possible into the collection system. The remaining vapor or pressure will then be
 routed into a separate tank or vessel where the vapor can either be captured or
 combusted if possible.