

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

Form C-101

August 1, 2011

Permit 340013

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address American Energy Resources LLC P.O. BOX 114 Hagerman, NM 88232		2. OGRID Number 372991
		3. API Number 30-015-53887
4. Property Code 334108	5. Property Name American Fee	6. Well No. 004

7. Surface Location

UL - Lot M	Section 27	Township 22S	Range 28E	Lot Idn	Feet From 525	N/S Line S	Feet From 525	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot M	Section 27	Township 22S	Range 28E	Lot Idn M	Feet From 525	N/S Line S	Feet From 525	E/W Line W	County Eddy
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9. Pool Information

CULEBRA BLUFF;BONE SPRING, SOUTH	15011
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3061
16. Multiple N	17. Proposed Depth 9630	18. Formation Bone Spring	19. Contractor	20. Spud Date 6/15/2023
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	48	360	350	0
Int1	12.25	9.625	36	2875	960	0
Prod	7.875	5.5	17	9630	1875	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	4000	Schaffer
Double Ram	5000	4000	Schaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Jonathan Samaniego	Approved By: Ward Rikala	
Title: Owner	Title:	
Email Address: energy.jrs@gmail.com	Approved Date: 6/15/2023	Expiration Date: 6/15/2025
Date: 6/1/2023	Phone: 575-499-7330	Conditions of Approval Attached

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DISTRICT IV
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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

API Number 30-015-53887	Pool Code 15011	Pool Name CULEBRA BLUFF; BONE SPRING, SOUTH
Property Code 334108	Property Name AMERICAN FEE	Well Number 4
OGRID No. 327991 372991	Operator Name AMERICAN ENERGY	Elevation 3061.0'

Surface Location									
UL or lot No. M	Section 27	Township 22-S	Range 28-E	Lot Idn	Feet from the 525	North/South line SOUTH	Feet from the 525	East/West line WEST	County EDDY

Bottom Hole Location If Different 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 40.00	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

	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. Signature BRIAN WOOD Date 5-9-23 Printed Name brian@permitswest.com E-mail Address	
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MAY 2, 2023 Date of Survey Signature & Seal of Professional Surveyor Signature Chad Harcrow Date 5/5/23 Certificate No. CHAD HARCROW 17777 W.O. # 23-338 DRAWN BY: WN	

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

Form APD Conditions

Permit 340013

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: American Energy Resources LLC [372991] P.O. BOX 114 Hagerman, NM 88232	API Number: 30-015-53887
	Well: American Fee #004

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	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
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing
ward.rikala	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
ward.rikala	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: AMERICAN ENERGY RESOURCES LLC OGRID: 327991 **Date:** 05 / 09 / 23

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 describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
AMERICAN FEE 4	30-015-	M-27-22S-28E	525 FSL	24	149	112
			525 FWL			

IV. Central Delivery Point Name: ENTERPRISE FIELD SERVICES @ RANA SALADA [See 19.15.27.9(D)(1) NMAC]
IN P-6-23S-29E

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
AMERICAN FEE 4	30-015-	5-18-23	5-31-23	7-1-23	7-31-23	8-15-23

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

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. ☐ 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 ☐ will ☐ 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 ☐ does ☐ 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:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial 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) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

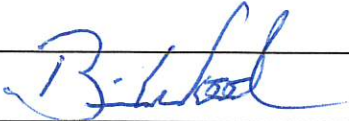
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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:	BRIAN WOOD
Title:	CONSULTANT
E-mail Address:	brian@permitswest.com
Date:	5-9-23
Phone:	505 466-8120

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. SEPARATION EQUIPMENT

American Energy Resources LLC (American) tentatively plans to install a separator, heater-treater, oil and water tanks, vapor recovery tower and piping among tanks, gas scrubber, and fuel safety shut-off valve depending on volumes.

VII. Operational Practices

NMAC 19.15.27.8 (A) Venting & Flaring of Natural Gas

1. American will comply NMAC 19.15.27.8 – venting and flaring of gas during drilling, completion, or production that constitutes waste as defined in 19.15.2 is banned.

NMAC 19.15.27.8 (B) Venting & Flaring During Drilling

1. American will capture or combust gas if technically feasible during drilling operations using best industry practices.
2. A flare stack with a 100% capacity for expected volume will be set on the pad ≥ 100 feet from the nearest well head and storage tank.
3. In an emergency, AMERICAN will vent gas in order to avoid substantial impact. AMERICAN will report vented or flared gas to the NMOCD.

NMAC 19.15.27.8 (C) Venting & Flaring During Completion or Recompletion

1. Facilities will be built and ready from the first day of flowback
2. Test separator will be properly separate gas and liquids. Temporary test separator will be used initially to process volumes. In addition, separator will be tied into flowback tanks which will be tied into the gas processing equipment for sale down a pipeline.
3. Should the facility not be ready to process gas, or the gas does not meet quality standards, then storage tanks will be set that are tied into gas busters or a temporary flare to manage all gas. This flare would meet the following requirements:
 - a) An appropriately sized flare stack with an automatic igniter
 - b) American analyzes gas samples twice a week
 - c) American flows the gas into a gathering line as soon as the pipeline specifications are met
 - d) American provides the NMOCD with pipeline specifications and natural gas data.

NMAC 19.15.27.8 (D) Venting & Flaring During Production

American will not vent or flare natural gas except:

1. During an emergency or malfunction

2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided
 - a) American does not vent after the well achieves a stabilized rate and pressure
 - b) American will be on-site while unloading liquids by manual purging and take all reasonable actions to achieve a stabilized rate and pressure as soon as possible
 - c) American will optimize the system to minimize gas venting if the well is equipped with a plunger lift or auto control system
 - d) Best management practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided
 - a) American receives approval from the NMOCD
 - b) American stays in compliance with NMOCD gas capture requirements
 - c) American submits an updated C-129 form to the NMOCD
4. During the following activities unless prohibited
 - a) Gauging or sampling a storage tank or low-pressure production vessel
 - b) Loading out liquids from a storage tank
 - c) Repair and maintenance
 - d) Normal operation of a gas-activated pneumatic controller or pump
 - e) Normal operation of a storage tank but not including venting from a thief hatch
 - f) Normal operation of dehydration units
 - g) Normal operations of compressors, engines, turbines, valves, flanges, & connectors
 - h) During a Braden head, packer leak test, or production test lasting <24 hours
 - i) When natural gas does not meet the gathering line specifications
 - j) Commissioning of lines, equipment, or facilities only for as long as necessary to purge introduced impurities.

NMAC 19.15.27.8 (E) Performance Standards

1. American used a safety factor to design the separation and storage equipment. The equipment will be routed to a vapor recovery system and uses a flare as back up for startup, shutdown, maintenance, or malfunction of the VRU system.
2. American will install a flare that will handle the full facility vapor volume in case the VRU fails. It will have an auto-ignition system.
3. Flare stacks will be appropriately sized and designed to ensure proper combustion efficiency
 - a) Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
 - b) Previously installed flare stacks will be retrofitted within 18 months of May 25, 2021 with an automatic ignitor, continuous pilot, or technology that alerts AMERICAN to flare malfunction.
 - c) Flare stacks replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot if at a well or facility with an average production of ≤ 60 Mcfd of natural gas.

- d) Flare stacks will be located >100 feet from well head and storage tanks and securely anchored.
- 4. American will conduct an audio/visual/olfactory inspection on all components for leaks and defects every week.
- 5. American will make and keep records of AVO inspections available to the NMOCD for at least 5 years.
- 6. American may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
- 7. Facilities will be designed to minimize waste.
- 8. American will resolve emergencies as promptly as possible.

NMAC 19.15.27.8 (F) Measuring or Estimating Vented & Flared Natural Gas

- 1. American will have meters on both the low pressure and high-pressure sides of the flares. Volumes will be recorded in the SCADA system.
- 2. American will install equipment to measure the volume of flared natural gas that has an average production of ≥ 60 Mcfd.
- 3. American's measuring equipment will conform to industry standards.
- 4. Measurement system will be designed such that it cannot be bypassed except for inspections and servicing the meters.
- 5. American will estimate the volume of vented or flared gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
- 6. American will estimate the volume of vented and flared gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on form C-116.
- 7. American will install measuring equipment whenever the NMOCD determines that metering is necessary.

VIII. Best Management Practices

American will minimize venting during maintenance by:

- 1. Designing and operating system to route storage tank and process equipment emissions to the VRU. If the VRU is not operable, then vapors will be routed to the flare.
- 2. Scheduling maintenance for multiple tasks to minimize the need for blowdowns.
- 3. After completion of maintenance, gas will be flared until it meets pipeline specifications.