

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 244690

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

1. Operator Name and Address ENERGEN RESOURCES CORPORATION 3510 North "A" Street Midland , TX 79705		2. OGRID Number 162928
4. Property Code 317499		3. API Number 30-025-44377
5. Property Name ANGUS STATE 24 35 16		6. Well No. 452H

7. Surface Location

UL - Lot C	Section 16	Township 24S	Range 35E	Lot Idn C	Feet From 300	N/S Line N	Feet From 1930	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot N	Section 16	Township 24S	Range 35E	Lot Idn N	Feet From 330	N/S Line S	Feet From 1650	E/W Line W	County Lea
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9. Pool Information

WC-025 G-09 S243532M;WOLFBONE	98098
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3389
16. Multiple N	17. Proposed Depth 16414	18. Formation Wolfbone	19. Contractor	20. Spud Date 2/15/2018
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	61	800	800	0
Int1	12.25	9.625	40	5210	1750	0
Int2	8.75	7	29	11480	1400	0
Prod	6.125	4.5	15.1	16414	500	11200

Casing/Cement Program: Additional Comments

Description of Operation Plan to drill a 17-1/2" hole to 800' with fresh water. Run 13-3/8", 61# J-55 casing and cement to surface. Drill 12-1/4" hole to 5,210' with brine water. Run 9-5/8" 40# HCL-80 casing and cement to surface. Drill 8-3/4" hole to 11,480' with cut brine. Run 7" 29# HCP-110 casing and cement to surface. Drill 6-1/8" hole curve and lateral with OBM to approximately 16,414'. Run 4-1/2" 15.1# CYP-110 liner and cement to 11,200'.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	10000	8500	Cameran
Pipe	10000	8500	Cameran
Annular	5000	8500	Cameran

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. Signature: Printed Name: Electronically filed by Jennifer L Stone Title: Email Address: jennifer.stone@energen.com Date: 1/17/2018 Phone: 432-818-1757	OIL CONSERVATION DIVISION Approved By: Paul Kautz Title: Geologist Approved Date: 1/18/2018 Expiration Date: 1/18/2020 Conditions of Approval Attached
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Form C-102
August 1, 2011

Permit 244690

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Oil Conservation Division
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WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-44377	2. Pool Code 98098	3. Pool Name WC-025 G-09 S243532M;WOLFBONE
4. Property Code 317499	5. Property Name ANGUS STATE 24 35 16	6. Well No. 452H
7. OGRID No. 162928	8. Operator Name ENERGEN RESOURCES CORPORATION	9. Elevation 3389

10. Surface Location

UL - Lot C	Section 16	Township 24S	Range 35E	Lot Idn C	Feet From 300	N/S Line N	Feet From 1930	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot N	Section 16	Township 24S	Range 35E	Lot Idn N	Feet From 330	N/S Line S	Feet From 1650	E/W Line W	County Lea
12. Dedicated Acres 160.00			13. Joint or Infill		14. Consolidation Code			15. 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>I hereby certify that the information contained 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(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> E-Signed By: Jennifer L Stone Title: Date: 1/17/2018 SURVEYOR CERTIFICATION <i>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.</i> Surveyed By: Wilson D. Watson Date of Survey: 1/4/2018 Certificate Number: 3959
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Form APD Comments

Permit 244690

PERMIT COMMENTS

Operator Name and Address: ENERGEN RESOURCES CORPORATION [162928] 3510 North "A" Street Midland , TX 79705		API Number: 30-025-44377
		Well: ANGUS STATE 24 35 16 #452H

Created By	Comment	Comment Date
Brenda Rathjen	Permit submitted by: Brenda F. Rathjen - Regulatory Analyst, Energen Resources Corporation 423-688-3323 Brenda.rathjen@energen.com	11/29/2017
ksharp	Gas Capture Plan must be submitted to Paul Kautz for completion of approval process	1/17/2018
pkautz	GCP Received 01/17/2018	1/18/2018

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Form APD Conditions

Permit 244690

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: ENERGEN RESOURCES CORPORATION [162928] 3510 North "A" Street Midland , TX 79705	API Number: 30-025-44377
	Well: ANGUS STATE 24 35 16 #452H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	1) SURFACE & INTERMEDIATE1 CASING - Cement must circulate to surface -- 2) INTERMEDIATE2 CASING - Cement must tie back into intermediate1 casing -- 3) PRODUCTION CASING - Cement must tie back into intermediate2 casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCDD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD.
pkautz	Stage Tool - 1) Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.