

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

Form C-101
August 1, 2011

Permit 245829

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

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

1. Operator Name and Address APACHE CORP 303 Veterans Airpark Lane Midland, TX 79705		2. OGRID Number 873
		3. API Number 30-015-44599
4. Property Code 319579	5. Property Name THUNDERBIRD A	6. Well No. 019H

7. Surface Location

UL - Lot I	Section 36	Township 16S	Range 30E	Lot Idn i	Feet From 2270	N/S Line S	Feet From 350	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot L	Section 36	Township 16S	Range 30E	Lot Idn L	Feet From 2270	N/S Line S	Feet From 340	E/W Line W	County Eddy
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9. Pool Information

LOCO HILLS; GLORIETA-YESO	96718
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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 3825
16. Multiple N	17. Proposed Depth 9115	18. Formation Yeso	19. Contractor	20. Spud Date 1/1/2018
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	48	400	280	0
Int1	12.25	9.625	36	3200	690	0
Prod	8.5	7	29	4200	185	2700
Prod	8.5	5.5	17	9115	0	2700

Casing/Cement Program: Additional Comments

5.5" will be tapered string; cmt above stage tool set at approx. 4190'
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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	2000	2000	
Annular	2000	1000	

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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: Printed Name: Electronically filed by Bobby Smith Title: Email Address: bobby.smith@apachecorp.com Date: 12/13/2017	OIL CONSERVATION DIVISION Approved By: Raymond Podany Title: Geologist Approved Date: 12/15/2017 Expiration Date: 12/15/2019 Conditions of Approval Attached
Phone: 432-818-1020	

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

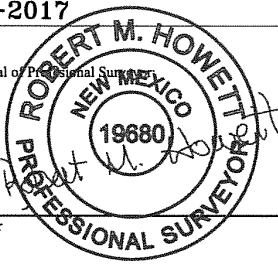
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-		² Pool Code 96718		³ Pool Name LOCO HILLS; GLORIETA-YESO					
⁴ Property Code 319579		⁵ Property Name THUNDERBIRD A						⁶ Well Number 19H	
⁷ OGRID NO. 873		⁸ Operator Name APACHE CORPORATION						⁹ Elevation 3825'	
¹⁰ Surface Location									
UL or lot no. I	Section 36	Township 16S	Range 30E	Lot Idn	Feet from the 2270	North/South line SOUTH	Feet From the 350	East/West line EAST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. L	Section 36	Township 16S	Range 30E	Lot Idn	Feet from the 2270	North/South line SOUTH	Feet from the 340	East/West line WEST	County EDDY
¹² Dedicated Acres 160		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

¹⁶ GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION N: 683032.4 - E: 668875.8 LAT: 32.8769865° N LONG: 103.9179023° W BOTTOM HOLE N: 683017.9 - E: 664284.9 LAT: 32.8769956° N LONG: 103.9328561° W		¹⁷ OPERATOR CERTIFICATION 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 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. Signature: <u>Sorina L Flores</u> Date: <u>12/11/17</u> Printed Name: <u>SORINA L FLORES</u> E-mail Address: <u>sorina.flores@apachecorp.com</u>	
¹⁸ 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. Date of Survey: <u>12-07-2017</u> Signature and Seal of Professional Surveyor:  Certificate Number: <u>19680</u>		¹⁹ CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1916" N: 680747.5 - E: 663952.3 B: CALCULATED CORNER N: 686030.0 - E: 663935.3 C: FOUND BRASS CAP "1916" N: 686043.1 - E: 669215.8 D: FOUND BRASS CAP "1916" N: 680764.3 - E: 669233.5 E: FOUND BRASS CAP "1916" N: 680755.6 - E: 666593.0 CALCULATED POINTS 1: N: 682084.0 - E: 669229.1 2: N: 682068.1 - E: 663948.1 3: N: 683388.7 - E: 663943.8 4: N: 683403.7 - E: 669224.6	

RRC - Job No.: LS1712797

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Santa Fe, NM 87505

Form APD Comments

Permit 245829

PERMIT COMMENTS

Operator Name and Address: APACHE CORP [873] 303 Veterans Airpark Lane Midland, TX 79705		API Number: 30-015-44599
		Well: THUNDERBIRD A #019H

Created By	Comment	Comment Date
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Form APD Conditions

Permit 245829

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: APACHE CORP [873] 303 Veterans Airpark Lane Midland, TX 79705	API Number: 30-015-44599
	Well: THUNDERBIRD A #019H

OCD Reviewer	Condition
RPodany	Will require a directional survey with the C-104
RPodany	Cement is required to circulate on both surface and intermediate1 strings of casing
RPodany	Pit construction and closure must satisfy all requirements of your approved plan.
RPodany	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well.