

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 279827

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

1. Operator Name and Address APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705		2. OGRID Number 873
		3. API Number 30-015-46999
4. Property Code 328103	5. Property Name PALMILLO 29 28 STATE COM	6. Well No. 273H

7. Surface Location

UL - Lot M	Section 29	Township 19S	Range 28E	Lot Idn	Feet From 1185	N/S Line S	Feet From 240	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot I	Section 28	Township 19S	Range 28E	Lot Idn I	Feet From 1760	N/S Line S	Feet From 50	E/W Line E	County Eddy
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9. Pool Information

WINCHESTER; BONE SPRING, WEST	97569
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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 3414
16. Multiple N	17. Proposed Depth 17346	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 5/14/2020
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	350	250	0
Int1	12.25	9.625	36	3000	625	0
Prod	8.75	5.5	17	7470	575	2500
Prod	8.5	5.5	17	17346	1850	7470

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	1500	
Double Ram	3000	3000	

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 Sorina Flores	Approved By: Raymond Podany	
Title: Supv of Drilling Services	Title: Geologist	
Email Address: sorina.flores@apachecorp.com	Approved Date: 4/9/2020	Expiration Date: 4/9/2022
Date: 4/8/2020	Phone: 432-818-1167	Conditions of Approval Attached

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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 97569	³ Pool Name WINCHESTER; BONE SPRING, W
⁴ Property Code	⁵ Property Name PALMILO 29 28 STATE COM	⁶ Well Number 273H
⁷ OGRID NO. 873	⁸ Operator Name APACHE CORPORATION	⁹ Elevation 3414'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
M	29	19S	28E		1185	SOUTH	240	WEST	EDDY

¹¹ 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
I	28	19S	28E		1760	SOUTH	50	EAST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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 (SL) N:592053.9 - E:580567.3 LAT: 32.6275413° N - LONG: 104.2059051° W KICK OFF POINT (KOP) 1699' FSL - 51' FWL (SEC. 29) N:592568.9 - E:580383.4 LAT: 32.6289575° N - LONG: 104.2065006° W MD: 5294.5 TVD: 5253.9 PENETRATION POINT/ FIRST TAKE POINT (PP/FTP) 1700' FSL - 100' FWL (SEC. 29) N:592569.6 - E:580432.8 LAT: 32.6289592° N - LONG: 104.2063401° W MD: 6943.1 TVD: 6894.4 LAST TAKE POINT (LTP) 1760' FSL - 100' FWL (SEC. 28) N:592704.0 - E:590670.5 LAT: 32.6292908° N - LONG: 104.1730844° W MD: 17296.1 TVD: 7464.4	BOTTOM HOLE (BH) N:592704.7 - E:590720.6 LAT: 32.6292924° N - LONG: 104.1729217° W MD: 17346.2 TVD: 7465.0 CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1941" N: 590871.3 - E: 580314.9 B: FOUND BRASS CAP "1941" N: 593498.9 - E: 580342.6 C: FOUND BRASS CAP "1941" N: 596120.3 - E: 580368.7 D: FOUND BRASS CAP "1941" N: 596144.1 - E: 582974.0 E: FOUND BRASS CAP "1941" N: 596170.1 - E: 585579.7 F: FOUND BRASS CAP "1941" N: 596193.2 - E: 588185.2 G: FOUND BRASS CAP "1941" N: 596216.2 - E: 590790.1 H: FOUND BRASS CAP "1941" N: 593580.2 - E: 590775.8 I: FOUND BRASS CAP "1941" N: 590945.1 - E: 590760.7 J: FOUND BRASS CAP "1941" N: 590906.8 - E: 585541.3 K: FOUND BRASS CAP "1941" N: 593538.2 - E: 585560.2 L: FOUND BRASS CAP "1941" N: 590849.0 - E: 582921.0 CALCULATED POINTS 1: N:590860.1 - E:581617.9 2: N:592184.4 - E:581631.5 3: N:592222.5 - E:585550.8 4: N:592262.6 - E:590768.2	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. Sorina L Flores 3/23/2020 Signature _____ Date _____ Sorina L Flores Printed Name sorina.flores@apachecorp.com E-mail Address
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. 9-20-19 Date of Survey Signature and Seal of Professional Surveyor 10034 Certificate Number ① REV 3/13/2020: DRILL PLAN		NEW MEXICO JEFFREY L. FANSLER 10034 PROFESSIONAL SURVEYOR

Job No.: LS19090904

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GAS CAPTURE PLAN

Date: 4/9/2020

☒ Original

Operator & OGRID No.: [873] APACHE CORPORATION

☐ 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
PALMILLO 29 28 STATE COM #273H	30-015-46999	M-29-19S-28E	1185S 0240W	2000	Flared	

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 DURANGO TRUCKING DBA JOSE C AVILA and will be connected to DURANGO TRUCKING DBA JOSE C AVILA Low Pressure gathering system located in Lea County, New Mexico. It will require 2500' of pipeline to connect the facility to Low Pressure gathering system. APACHE CORPORATION provides (periodically) to DURANGO TRUCKING DBA JOSE C AVILA a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, APACHE CORPORATION and DURANGO TRUCKING DBA JOSE C AVILA have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DURANGO TRUCKING DBA JOSE C AVILA Processing Plant located in Sec. 28, Twn. 17S, Rng. 32E, Lea County, New Mexico. 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 DURANGO TRUCKING DBA JOSE C AVILA system at that time. Based on current information, it is APACHE CORPORATION'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

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Form APD Comments

Permit 279827

PERMIT COMMENTS

Operator Name and Address: APACHE CORPORATION [873] 303 Veterans Airpark Ln Midland, TX 79705		API Number: 30-015-46999
		Well: PALMILLO 29 28 STATE COM #273H
Created By	Comment	Comment Date
sflores	Apache respectfully request approval to utilize spudder rig to pre-set surface csg. Procedure attached.	3/23/2020
sflores	Durango Midstream will be gathering system for Gas Capture Plan. Durango Midstream not available in pick list.	3/23/2020

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Form APD Conditions

Permit 279827

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: APACHE CORPORATION [873] 303 Veterans Airpark Ln Midland, TX 79705		API Number: 30-015-46999
		Well: PALMILLO 29 28 STATE COM #273H
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	

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Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

☒ Original Operator: Apache Corporation OGRID No: 873 Date: 3/19/2019
☐ Amended Date: _____
Reason for Amendment: _____

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Palmillo 29 28 State Com 271H		Sec 29 T19S R28E	1610' FNL & 240' FWL	2000	Flared	Flared only in emergency
Palmillo 29 28 State Com 272H		Sec 29 T19S R28E	1670' FNL & 240' FWL	2000	Flared	Flared only in emergency
Palmillo 29 28 State Com 375H		Sec 29 T19S R28E	1580' FNL & 240' FWL	2000	Flared	Flare only in emergency
Palmillo 29 28 State Com 376H		Sec 29 T19S R28E	1640' FNL & 240' FWL	2000	Flared	Flared only in emergency

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 **DURANGO MIDSTREAM, LLC** and will be connected to **DURANGO's LOW** pressure gathering system located in **EDDY** County, New Mexico. It will require **2500** ft of pipeline to connect the facility to **LOW** pressure gathering system. Apache Corporation provides (periodically) to **DURANGO MIDSTREAM, LLC** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Apache Corporation and **DURANGO MIDSTREAM, LLC** have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at **DURANGO's MALJAMAR** Processing Plant located in **Sec. 28, Twp 17S, Rng 32E, LEA County**, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-	² Pool Code 97569	³ Pool Name WINCHESTER; BONE SPRING, W
⁴ Property Code	⁵ Property Name PALMILO 29 28 STATE COM	⁶ Well Number 273H
⁷ OGRID NO. 873	⁸ Operator Name APACHE CORPORATION	⁹ Elevation 3414'

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¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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Job No.: LS19090904

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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 (SL) N:592053.9 - E:580567.3 LAT: 32.6275413° N - LONG: 104.2059051° W KICK OFF POINT (KOP) 1699' FSL - 51' FWL (SEC. 29) N:592568.9 - E:580383.4 LAT: 32.6289575° N - LONG: 104.2065006° W MD: 5294.5 TVD: 5253.9 PENETRATION POINT/ FIRST TAKE POINT (PP/FTP) 1700' FSL - 100' FWL (SEC. 29) N:592569.6 - E:580432.8 LAT: 32.6289592° N - LONG: 104.2063401° W MD: 6943.1 TVD: 6894.4 LAST TAKE POINT (LTP) 1760' FSL - 100' FWL (SEC. 28) N:592704.0 - E:590670.5 LAT: 32.6292908° N - LONG: 104.1730844° W MD: 17296.1 TVD: 7464.4	BOTTOM HOLE (BH) N:592704.7 - E:590720.6 LAT: 32.6292924° N - LONG: 104.1729217° W MD: 17346.2 TVD: 7465.0 CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1941" N: 590871.3 - E: 580314.9 B: FOUND BRASS CAP "1941" N: 593498.9 - E: 580342.6 C: FOUND BRASS CAP "1941" N: 596120.3 - E: 580368.7 D: FOUND BRASS CAP "1941" N: 596144.1 - E: 582974.0 E: FOUND BRASS CAP "1941" N: 596170.1 - E: 585579.7 F: FOUND BRASS CAP "1941" N: 596193.2 - E: 588185.2 G: FOUND BRASS CAP "1941" N: 596216.2 - E: 590790.1 H: FOUND BRASS CAP "1941" N: 593580.2 - E: 590775.8 I: FOUND BRASS CAP "1941" N: 590945.1 - E: 590760.7 FOUND BRASS CAP "1941" J: N: 590906.8 - E: 585541.3 K: N: 593538.2 - E: 585560.2 L: N: 590849.0 - E: 582921.0 CALCULATED POINTS 1: N: 590860.1 - E: 581617.9 2: N: 592184.4 - E: 581631.5 3: N: 592222.5 - E: 585550.8 4: N: 592262.6 - E: 590768.2	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. Sorina L Flores 3/23/2020 Signature _____ Date _____ Sorina L Flores Printed Name _____ sorina.flores@apachecorp.com E-mail Address _____
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. 9-20-19 Date of Survey _____ Signature and Seal of Professional Surveyor _____ 10034 Certificate Number ① REV 3/13/2020: DRILL PLAN		NEW MEXICO JEFFREY L. FANSLER 10034 PROFESSIONAL SURVEYOR

Job No.: LS19090904

PERMIAN

NW DISTRICT - NM EZ NAD 83

PALMILLO 29-28 STATE COM

PALMILLO 29-28 STATE COM 273H

Wellbore #1

Plan: Design #1

Standard Planning Report

19 March, 2020

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well PALMILLO 29-28 STATE COM 273H
Company:	PERMIAN	TVD Reference:	WELL @ 3440.0ft (Original Well Elev)
Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	NW DISTRICT - NM EZ NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	PALMILLO 29-28 STATE COM			
Site Position:		Northing:	594,542.70 ft	Latitude: 32° 38' 3.764 N
From: Map		Easting:	580,592.90 ft	Longitude: 104° 12' 20.938 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence: 0.07 °

Well	PALMILLO 29-28 STATE COM 273H			
Well Position	+N/-S	-2,488.8 ft	Northing:	592,053.90 ft
	+E/-W	-25.6 ft	Easting:	580,567.30 ft
Position Uncertainty		0.0 ft	Wellhead Elevation:	Latitude: 32° 37' 39.137 N
				Longitude: 104° 12' 21.272 W
				Ground Level: 3,414.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	12/31/2019	7.13	60.37	47,904.40000000

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	86.33

Plan Survey Tool Program	Date	3/11/2020		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,346.2	Design #1 (Wellbore #1)	MWD+HDGM (MWD)
				OWSG MWD + HDGM

Planning Report

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Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,800.0	9.00	340.35	1,797.5	44.3	-15.8	1.50	1.50	0.00	340.35	
4,694.5	9.00	340.35	4,656.4	470.7	-168.1	0.00	0.00	0.00	0.00	
5,294.5	0.00	0.00	5,253.9	515.0	-183.9	1.50	-1.50	0.00	180.00	
6,729.4	0.00	0.00	6,688.8	515.0	-183.9	0.00	0.00	0.00	0.00	
7,470.0	88.88	89.25	7,166.2	521.1	284.2	12.00	12.00	12.05	89.25	
8,784.0	88.88	89.25	7,191.9	538.4	1,597.8	0.00	0.00	0.00	0.00	T2 PALMILLO 29 STA
8,822.3	89.64	89.25	7,192.4	538.9	1,636.1	2.00	2.00	0.00	0.00	
10,141.8	89.64	89.25	7,200.6	556.2	2,955.5	0.00	0.00	0.00	0.00	T3 PALMILLO 29 STA
10,272.9	87.02	89.25	7,204.4	558.0	3,086.4	2.00	-2.00	0.00	180.00	
11,915.1	87.02	89.25	7,289.7	579.5	4,726.3	0.00	0.00	0.00	0.00	T4 PALMILLO 29 STA
12,010.5	88.93	89.25	7,293.1	580.8	4,821.6	2.00	2.00	0.00	0.00	
12,837.2	88.93	89.25	7,308.5	591.6	5,648.1	0.00	0.00	0.00	0.00	T5 PALMILLO 29 STA
12,925.7	87.16	89.25	7,311.5	592.8	5,736.6	2.00	-2.00	0.00	180.00	
15,518.9	87.16	89.25	7,440.0	626.8	8,326.4	0.00	0.00	0.00	0.00	T6 PALMILLO 29 STA
15,624.8	89.28	89.25	7,443.3	628.2	8,432.2	2.00	2.00	0.00	0.00	
17,346.2	89.28	89.25	7,465.0	650.8	10,153.3	0.00	0.00	0.00	0.00	BHL PALMILLO 29 STA

Planning Report

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Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	1.50	340.35	1,300.0	1.2	-0.4	-0.4	1.50	1.50	0.00
1,400.0	3.00	340.35	1,399.9	4.9	-1.8	-1.4	1.50	1.50	0.00
1,500.0	4.50	340.35	1,499.7	11.1	-4.0	-3.2	1.50	1.50	0.00
1,600.0	6.00	340.35	1,599.3	19.7	-7.0	-5.8	1.50	1.50	0.00
1,700.0	7.50	340.35	1,698.6	30.8	-11.0	-9.0	1.50	1.50	0.00
1,800.0	9.00	340.35	1,797.5	44.3	-15.8	-12.9	1.50	1.50	0.00
1,900.0	9.00	340.35	1,896.3	59.0	-21.1	-17.3	0.00	0.00	0.00
2,000.0	9.00	340.35	1,995.1	73.8	-26.3	-21.6	0.00	0.00	0.00
2,100.0	9.00	340.35	2,093.8	88.5	-31.6	-25.9	0.00	0.00	0.00
2,200.0	9.00	340.35	2,192.6	103.2	-36.9	-30.2	0.00	0.00	0.00
2,300.0	9.00	340.35	2,291.4	117.9	-42.1	-34.5	0.00	0.00	0.00
2,400.0	9.00	340.35	2,390.1	132.7	-47.4	-38.8	0.00	0.00	0.00
2,500.0	9.00	340.35	2,488.9	147.4	-52.6	-43.1	0.00	0.00	0.00
2,600.0	9.00	340.35	2,587.7	162.1	-57.9	-47.4	0.00	0.00	0.00
2,700.0	9.00	340.35	2,686.5	176.9	-63.2	-51.7	0.00	0.00	0.00
2,800.0	9.00	340.35	2,785.2	191.6	-68.4	-56.0	0.00	0.00	0.00
2,900.0	9.00	340.35	2,884.0	206.3	-73.7	-60.3	0.00	0.00	0.00
3,000.0	9.00	340.35	2,982.8	221.1	-78.9	-64.6	0.00	0.00	0.00
3,100.0	9.00	340.35	3,081.5	235.8	-84.2	-68.9	0.00	0.00	0.00
3,200.0	9.00	340.35	3,180.3	250.5	-89.5	-73.3	0.00	0.00	0.00
3,300.0	9.00	340.35	3,279.1	265.3	-94.7	-77.6	0.00	0.00	0.00
3,400.0	9.00	340.35	3,377.8	280.0	-100.0	-81.9	0.00	0.00	0.00
3,500.0	9.00	340.35	3,476.6	294.7	-105.2	-86.2	0.00	0.00	0.00
3,600.0	9.00	340.35	3,575.4	309.5	-110.5	-90.5	0.00	0.00	0.00
3,700.0	9.00	340.35	3,674.1	324.2	-115.8	-94.8	0.00	0.00	0.00
3,800.0	9.00	340.35	3,772.9	338.9	-121.0	-99.1	0.00	0.00	0.00
3,900.0	9.00	340.35	3,871.7	353.7	-126.3	-103.4	0.00	0.00	0.00
4,000.0	9.00	340.35	3,970.4	368.4	-131.6	-107.7	0.00	0.00	0.00
4,100.0	9.00	340.35	4,069.2	383.1	-136.8	-112.0	0.00	0.00	0.00
4,200.0	9.00	340.35	4,168.0	397.9	-142.1	-116.3	0.00	0.00	0.00
4,300.0	9.00	340.35	4,266.8	412.6	-147.3	-120.6	0.00	0.00	0.00
4,400.0	9.00	340.35	4,365.5	427.3	-152.6	-124.9	0.00	0.00	0.00
4,500.0	9.00	340.35	4,464.3	442.1	-157.9	-129.3	0.00	0.00	0.00
4,600.0	9.00	340.35	4,563.1	456.8	-163.1	-133.6	0.00	0.00	0.00
4,694.5	9.00	340.35	4,656.4	470.7	-168.1	-137.6	0.00	0.00	0.00
4,700.0	8.92	340.35	4,661.8	471.5	-168.4	-137.9	1.50	-1.50	0.00
4,800.0	7.42	340.35	4,760.8	484.9	-173.2	-141.8	1.50	-1.50	0.00
4,900.0	5.92	340.35	4,860.1	495.8	-177.1	-145.0	1.50	-1.50	0.00
5,000.0	4.42	340.35	4,959.7	504.3	-180.1	-147.5	1.50	-1.50	0.00
5,100.0	2.92	340.35	5,059.5	510.3	-182.2	-149.2	1.50	-1.50	0.00
5,200.0	1.42	340.35	5,159.4	513.9	-183.5	-150.3	1.50	-1.50	0.00

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well PALMILLO 29-28 STATE COM 273H
Company:	PERMIAN	TVD Reference:	WELL @ 3440.0ft (Original Well Elev)
Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,294.5	0.00	0.00	5,253.9	515.0	-183.9	-150.6	1.50	-1.50	0.00
5,300.0	0.00	0.00	5,259.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,359.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,459.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,559.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,659.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,759.4	515.0	-183.9	-150.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,859.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,959.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,059.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,159.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,259.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,359.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,459.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,559.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,659.4	515.0	-183.9	-150.6	0.00	0.00	0.00
6,729.4	0.00	0.00	6,688.8	515.0	-183.9	-150.6	0.00	0.00	0.00
6,800.0	8.48	89.25	6,759.2	515.1	-178.7	-145.4	12.00	12.00	0.00
6,900.0	20.48	89.25	6,855.8	515.4	-153.7	-120.5	12.00	12.00	0.00
7,000.0	32.48	89.25	6,945.2	516.0	-109.2	-76.0	12.00	12.00	0.00
7,100.0	44.48	89.25	7,023.3	516.8	-47.1	-14.0	12.00	12.00	0.00
7,200.0	56.48	89.25	7,086.8	517.8	29.9	62.9	12.00	12.00	0.00
7,300.0	68.48	89.25	7,133.0	519.0	118.4	151.3	12.00	12.00	0.00
7,400.0	80.48	89.25	7,159.7	520.2	214.5	247.4	12.00	12.00	0.00
7,470.0	88.88	89.25	7,166.2	521.1	284.2	316.9	12.00	12.00	0.00
7,500.0	88.88	89.25	7,166.8	521.5	314.2	346.9	0.00	0.00	0.00
7,600.0	88.88	89.25	7,168.7	522.9	414.1	446.7	0.00	0.00	0.00
7,700.0	88.88	89.25	7,170.7	524.2	514.1	546.6	0.00	0.00	0.00
7,800.0	88.88	89.25	7,172.6	525.5	614.1	646.4	0.00	0.00	0.00
7,900.0	88.88	89.25	7,174.6	526.8	714.0	746.3	0.00	0.00	0.00
8,000.0	88.88	89.25	7,176.5	528.1	814.0	846.1	0.00	0.00	0.00
8,100.0	88.88	89.25	7,178.5	529.4	914.0	946.0	0.00	0.00	0.00
8,200.0	88.88	89.25	7,180.5	530.7	1,014.0	1,045.8	0.00	0.00	0.00
8,300.0	88.88	89.25	7,182.4	532.0	1,113.9	1,145.7	0.00	0.00	0.00
8,400.0	88.88	89.25	7,184.4	533.4	1,213.9	1,245.5	0.00	0.00	0.00
8,500.0	88.88	89.25	7,186.3	534.7	1,313.9	1,345.4	0.00	0.00	0.00
8,600.0	88.88	89.25	7,188.3	536.0	1,413.8	1,445.2	0.00	0.00	0.00
8,700.0	88.88	89.25	7,190.3	537.3	1,513.8	1,545.1	0.00	0.00	0.00
8,784.0	88.88	89.25	7,191.9	538.4	1,597.8	1,629.0	0.00	0.00	0.00
8,800.0	89.20	89.25	7,192.2	538.6	1,613.8	1,644.9	2.00	2.00	0.00
8,822.3	89.64	89.25	7,192.4	538.9	1,636.1	1,667.2	2.00	2.00	0.00
8,900.0	89.64	89.25	7,192.9	539.9	1,713.8	1,744.8	0.00	0.00	0.00
9,000.0	89.64	89.25	7,193.5	541.2	1,813.8	1,844.7	0.00	0.00	0.00
9,100.0	89.64	89.25	7,194.1	542.6	1,913.8	1,944.5	0.00	0.00	0.00
9,200.0	89.64	89.25	7,194.7	543.9	2,013.7	2,044.4	0.00	0.00	0.00
9,300.0	89.64	89.25	7,195.4	545.2	2,113.7	2,144.3	0.00	0.00	0.00
9,400.0	89.64	89.25	7,196.0	546.5	2,213.7	2,244.2	0.00	0.00	0.00
9,500.0	89.64	89.25	7,196.6	547.8	2,313.7	2,344.0	0.00	0.00	0.00
9,600.0	89.64	89.25	7,197.2	549.1	2,413.7	2,443.9	0.00	0.00	0.00
9,700.0	89.64	89.25	7,197.9	550.4	2,513.7	2,543.8	0.00	0.00	0.00
9,800.0	89.64	89.25	7,198.5	551.8	2,613.7	2,643.6	0.00	0.00	0.00
9,900.0	89.64	89.25	7,199.1	553.1	2,713.7	2,743.5	0.00	0.00	0.00
10,000.0	89.64	89.25	7,199.7	554.4	2,813.7	2,843.4	0.00	0.00	0.00
10,100.0	89.64	89.25	7,200.3	555.7	2,913.7	2,943.2	0.00	0.00	0.00

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well PALMILLO 29-28 STATE COM 273H
Company:	PERMIAN	TVD Reference:	WELL @ 3440.0ft (Original Well Elev)
Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,141.8	89.64	89.25	7,200.6	556.2	2,955.5	2,985.0	0.00	0.00	0.00	
10,200.0	88.48	89.25	7,201.6	557.0	3,013.6	3,043.1	2.00	-2.00	0.00	
10,272.9	87.02	89.25	7,204.4	558.0	3,086.4	3,115.8	2.00	-2.00	0.00	
10,300.0	87.02	89.25	7,205.8	558.3	3,113.5	3,142.9	0.00	0.00	0.00	
10,400.0	87.02	89.25	7,211.0	559.6	3,213.4	3,242.6	0.00	0.00	0.00	
10,500.0	87.02	89.25	7,216.2	560.9	3,313.2	3,342.3	0.00	0.00	0.00	
10,600.0	87.02	89.25	7,221.4	562.3	3,413.1	3,442.1	0.00	0.00	0.00	
10,700.0	87.02	89.25	7,226.6	563.6	3,513.0	3,541.8	0.00	0.00	0.00	
10,800.0	87.02	89.25	7,231.8	564.9	3,612.8	3,641.5	0.00	0.00	0.00	
10,900.0	87.02	89.25	7,237.0	566.2	3,712.7	3,741.3	0.00	0.00	0.00	
11,000.0	87.02	89.25	7,242.2	567.5	3,812.5	3,841.0	0.00	0.00	0.00	
11,100.0	87.02	89.25	7,247.4	568.8	3,912.4	3,940.8	0.00	0.00	0.00	
11,200.0	87.02	89.25	7,252.6	570.1	4,012.2	4,040.5	0.00	0.00	0.00	
11,300.0	87.02	89.25	7,257.8	571.4	4,112.1	4,140.2	0.00	0.00	0.00	
11,400.0	87.02	89.25	7,262.9	572.7	4,212.0	4,240.0	0.00	0.00	0.00	
11,500.0	87.02	89.25	7,268.1	574.1	4,311.8	4,339.7	0.00	0.00	0.00	
11,600.0	87.02	89.25	7,273.3	575.4	4,411.7	4,439.4	0.00	0.00	0.00	
11,700.0	87.02	89.25	7,278.5	576.7	4,511.5	4,539.2	0.00	0.00	0.00	
11,800.0	87.02	89.25	7,283.7	578.0	4,611.4	4,638.9	0.00	0.00	0.00	
11,900.0	87.02	89.25	7,288.9	579.3	4,711.2	4,738.6	0.00	0.00	0.00	
11,915.1	87.02	89.25	7,289.7	579.5	4,726.3	4,753.7	0.00	0.00	0.00	
12,000.0	88.72	89.25	7,292.9	580.6	4,811.1	4,838.4	2.00	2.00	0.00	
12,010.5	88.93	89.25	7,293.1	580.8	4,821.6	4,848.9	2.00	2.00	0.00	
12,100.0	88.93	89.25	7,294.7	581.9	4,911.1	4,938.3	0.00	0.00	0.00	
12,200.0	88.93	89.25	7,296.6	583.2	5,011.1	5,038.1	0.00	0.00	0.00	
12,300.0	88.93	89.25	7,298.5	584.6	5,111.1	5,138.0	0.00	0.00	0.00	
12,400.0	88.93	89.25	7,300.3	585.9	5,211.0	5,237.8	0.00	0.00	0.00	
12,500.0	88.93	89.25	7,302.2	587.2	5,311.0	5,337.7	0.00	0.00	0.00	
12,600.0	88.93	89.25	7,304.1	588.5	5,411.0	5,437.6	0.00	0.00	0.00	
12,700.0	88.93	89.25	7,305.9	589.8	5,511.0	5,537.4	0.00	0.00	0.00	
12,800.0	88.93	89.25	7,307.8	591.1	5,610.9	5,637.3	0.00	0.00	0.00	
12,837.2	88.93	89.25	7,308.5	591.6	5,648.1	5,674.4	0.00	0.00	0.00	
12,900.0	87.67	89.25	7,310.4	592.4	5,710.9	5,737.1	2.00	-2.00	0.00	
12,925.7	87.16	89.25	7,311.5	592.8	5,736.6	5,762.7	2.00	-2.00	0.00	
13,000.0	87.16	89.25	7,315.2	593.8	5,810.8	5,836.8	0.00	0.00	0.00	
13,100.0	87.16	89.25	7,320.2	595.1	5,910.6	5,936.6	0.00	0.00	0.00	
13,200.0	87.16	89.25	7,325.1	596.4	6,010.5	6,036.3	0.00	0.00	0.00	
13,300.0	87.16	89.25	7,330.1	597.7	6,110.4	6,136.1	0.00	0.00	0.00	
13,400.0	87.16	89.25	7,335.0	599.0	6,210.2	6,235.8	0.00	0.00	0.00	
13,500.0	87.16	89.25	7,340.0	600.3	6,310.1	6,335.6	0.00	0.00	0.00	
13,600.0	87.16	89.25	7,344.9	601.6	6,410.0	6,435.3	0.00	0.00	0.00	
13,700.0	87.16	89.25	7,349.9	602.9	6,509.8	6,535.1	0.00	0.00	0.00	
13,800.0	87.16	89.25	7,354.8	604.2	6,609.7	6,634.8	0.00	0.00	0.00	
13,900.0	87.16	89.25	7,359.8	605.6	6,709.6	6,734.6	0.00	0.00	0.00	
14,000.0	87.16	89.25	7,364.7	606.9	6,809.5	6,834.3	0.00	0.00	0.00	
14,100.0	87.16	89.25	7,369.7	608.2	6,909.3	6,934.1	0.00	0.00	0.00	
14,200.0	87.16	89.25	7,374.7	609.5	7,009.2	7,033.8	0.00	0.00	0.00	
14,300.0	87.16	89.25	7,379.6	610.8	7,109.1	7,133.6	0.00	0.00	0.00	
14,400.0	87.16	89.25	7,384.6	612.1	7,208.9	7,233.3	0.00	0.00	0.00	
14,500.0	87.16	89.25	7,389.5	613.4	7,308.8	7,333.1	0.00	0.00	0.00	
14,600.0	87.16	89.25	7,394.5	614.7	7,408.7	7,432.8	0.00	0.00	0.00	
14,700.0	87.16	89.25	7,399.4	616.1	7,508.5	7,532.6	0.00	0.00	0.00	
14,800.0	87.16	89.25	7,404.4	617.4	7,608.4	7,632.3	0.00	0.00	0.00	
14,900.0	87.16	89.25	7,409.3	618.7	7,708.3	7,732.1	0.00	0.00	0.00	

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well PALMILLO 29-28 STATE COM 273H
Company:	PERMIAN	TVD Reference:	WELL @ 3440.0ft (Original Well Elev)
Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,000.0	87.16	89.25	7,414.3	620.0	7,808.1	7,831.8	0.00	0.00	0.00	
15,100.0	87.16	89.25	7,419.2	621.3	7,908.0	7,931.6	0.00	0.00	0.00	
15,200.0	87.16	89.25	7,424.2	622.6	8,007.9	8,031.3	0.00	0.00	0.00	
15,300.0	87.16	89.25	7,429.2	623.9	8,107.7	8,131.0	0.00	0.00	0.00	
15,400.0	87.16	89.25	7,434.1	625.2	8,207.6	8,230.8	0.00	0.00	0.00	
15,500.0	87.16	89.25	7,439.1	626.6	8,307.5	8,330.5	0.00	0.00	0.00	
15,518.9	87.16	89.25	7,440.0	626.8	8,326.4	8,349.4	0.00	0.00	0.00	
15,600.0	88.78	89.25	7,442.9	627.9	8,407.4	8,430.3	2.00	2.00	0.00	
15,624.8	89.28	89.25	7,443.3	628.2	8,432.2	8,455.1	2.00	2.00	0.00	
15,700.0	89.28	89.25	7,444.2	629.2	8,507.4	8,530.2	0.00	0.00	0.00	
15,800.0	89.28	89.25	7,445.5	630.5	8,607.4	8,630.1	0.00	0.00	0.00	
15,900.0	89.28	89.25	7,446.8	631.8	8,707.3	8,729.9	0.00	0.00	0.00	
16,000.0	89.28	89.25	7,448.0	633.1	8,807.3	8,829.8	0.00	0.00	0.00	
16,100.0	89.28	89.25	7,449.3	634.4	8,907.3	8,929.7	0.00	0.00	0.00	
16,200.0	89.28	89.25	7,450.5	635.7	9,007.3	9,029.5	0.00	0.00	0.00	
16,300.0	89.28	89.25	7,451.8	637.1	9,107.3	9,129.4	0.00	0.00	0.00	
16,400.0	89.28	89.25	7,453.1	638.4	9,207.3	9,229.2	0.00	0.00	0.00	
16,500.0	89.28	89.25	7,454.3	639.7	9,307.2	9,329.1	0.00	0.00	0.00	
16,600.0	89.28	89.25	7,455.6	641.0	9,407.2	9,429.0	0.00	0.00	0.00	
16,700.0	89.28	89.25	7,456.9	642.3	9,507.2	9,528.8	0.00	0.00	0.00	
16,800.0	89.28	89.25	7,458.1	643.6	9,607.2	9,628.7	0.00	0.00	0.00	
16,900.0	89.28	89.25	7,459.4	644.9	9,707.2	9,728.6	0.00	0.00	0.00	
17,000.0	89.28	89.25	7,460.6	646.3	9,807.2	9,828.4	0.00	0.00	0.00	
17,100.0	89.28	89.25	7,461.9	647.6	9,907.1	9,928.3	0.00	0.00	0.00	
17,200.0	89.28	89.25	7,463.2	648.9	10,007.1	10,028.1	0.00	0.00	0.00	
17,300.0	89.28	89.25	7,464.4	650.2	10,107.1	10,128.0	0.00	0.00	0.00	
17,346.2	89.28	89.25	7,465.0	650.8	10,153.3	10,174.1	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
T2 PALMILLO 29 STATE - hit/miss target - Shape - Point	0.00	0.00	7,191.9	538.4	1,597.8	592,592.31	582,165.14	32° 37' 44.446 N	104° 12' 2.580 W	
T3 PALMILLO 29 STATE - plan hits target center - Point	0.00	0.00	7,200.6	556.2	2,955.5	592,610.15	583,522.77	32° 37' 44.605 N	104° 11' 46.704 W	
T4 PALMILLO 29 STATE - plan hits target center - Point	0.00	0.00	7,289.7	579.5	4,726.3	592,633.41	585,293.61	32° 37' 44.812 N	104° 11' 25.996 W	
T5 PALMILLO 29 STATE - plan hits target center - Point	0.00	0.00	7,308.5	591.6	5,648.1	592,645.52	586,215.43	32° 37' 44.920 N	104° 11' 15.216 W	
T6 PALMILLO 29 STATE - plan hits target center - Point	0.00	0.00	7,440.0	626.8	8,326.4	592,680.70	588,893.66	32° 37' 45.230 N	104° 10' 43.896 W	
BHL PALMILLO 29 STA1 - plan hits target center - Point	0.00	0.00	7,465.0	650.8	10,153.3	592,704.70	590,720.60	32° 37' 45.441 N	104° 10' 22.532 W	

Planning Report

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Company:	PERMIAN	TVD Reference:	WELL @ 3440.0ft (Original Well Elev)
Project:	NW DISTRICT - NM EZ NAD 83	MD Reference:	WELL @ 3440.0ft (Original Well Elev)
Site:	PALMILLO 29-28 STATE COM	North Reference:	Grid
Well:	PALMILLO 29-28 STATE COM 273H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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 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, 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 97569	³ Pool Name WINCHESTER; BONE SPRING, W
⁴ Property Code	⁵ Property Name PALMILO 29 28 STATE COM	⁶ Well Number 273H
⁷ OGRID NO. 873	⁸ Operator Name APACHE CORPORATION	⁹ Elevation 3414'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
M	29	19S	28E		1185	SOUTH	240	WEST	EDDY

¹¹ 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
I	28	19S	28E		1760	SOUTH	50	EAST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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 (SL) N:592053.9 - E:580567.3 LAT: 32.6275413° N - LONG: 104.2059051° W KICK OFF POINT (KOP) 1699' FSL - 51' FWL (SEC. 29) N:592568.9 - E:580383.4 LAT: 32.6289575° N - LONG: 104.2065006° W MD: 5294.5 TVD: 5253.9 PENETRATION POINT/ FIRST TAKE POINT (PP/FTP) 1700' FSL - 100' FWL (SEC. 29) N:592569.6 - E:580432.8 LAT: 32.6289592° N - LONG: 104.2063401° W MD: 6943.1 TVD: 6894.4 LAST TAKE POINT (LTP) 1760' FSL - 100' FWL (SEC. 28) N:592704.0 - E:590670.5 LAT: 32.6292908° N - LONG: 104.1730844° W MD: 17296.1 TVD: 7464.4	BOTTOM HOLE (BH) N:592704.7 - E:590720.6 LAT: 32.6292924° N - LONG: 104.1729217° W MD: 17346.2 TVD: 7465.0 CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1941" N: 590871.3 - E: 580314.9 B: FOUND BRASS CAP "1941" N: 593498.9 - E: 580342.6 C: FOUND BRASS CAP "1941" N: 596120.3 - E: 580368.7 D: FOUND BRASS CAP "1941" N: 596144.1 - E: 582974.0 E: FOUND BRASS CAP "1941" N: 596170.1 - E: 585579.7 F: FOUND BRASS CAP "1941" N: 596193.2 - E: 588185.2 G: FOUND BRASS CAP "1941" N: 596216.2 - E: 590790.1 H: FOUND BRASS CAP "1941" N: 593580.2 - E: 590775.8 I: FOUND BRASS CAP "1941" N: 590945.1 - E: 590760.7 FOUND BRASS CAP "1941" J: N: 590906.8 - E: 585541.3 K: N: 593538.2 - E: 585560.2 L: N: 590849.0 - E: 582921.0 CALCULATED POINTS 1: N: 590860.1 - E: 581617.9 2: N: 592184.4 - E: 581631.5 3: N: 592222.5 - E: 585550.8 4: N: 592262.6 - E: 590768.2	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. Sorina L Flores 3/23/2020 Signature _____ Date _____ Sorina L Flores Printed Name sorina.flores@apachecorp.com E-mail Address
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. 9-20-19 Date of Survey Signature and Seal of Professional Surveyor 10034 Certificate Number ① REV 3/13/2020: DRILL PLAN		NEW MEXICO JEFFREY L. FANSLER 10034 PROFESSIONAL SURVEYOR

Job No.: LS19090904

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018