

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 362773

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 CORPORATION 303 Veterans Airpark Ln Midland, TX 79705		2. OGRID Number 873
		3. API Number 30-015-55003
4. Property Code 335857	5. Property Name CAMACHO 25 26 STATE COM	6. Well No. 201H

7. Surface Location

UL - Lot I	Section 25	Township 19S	Range 27E	Lot Idn	Feet From 2542	N/S Line S	Feet From 750	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot D	Section 26	Township 19S	Range 27E	Lot Idn D	Feet From 333	N/S Line N	Feet From 50	E/W Line W	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 3470
16. Multiple N	17. Proposed Depth 19340	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 8/10/2024
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	400	212	0
Int1	12.25	9.625	40	3000	579	0
Prod	8.5	5.5	20	19340	2843	400

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. Signature: _____ Printed Name: Electronically filed by Sorina Flores Title: Supv of Drilling Services Email Address: sorina.flores@apachecorp.com Date: 5/2/2024		OIL CONSERVATION DIVISION Approved By: Ward Rikala Title: _____ Approved Date: 5/7/2024 Expiration Date: 5/7/2026 Conditions of Approval Attached	
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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- 55003	Pool Code 97569	Pool Name Winchestet; Bone Spring, West
Property Code 335857	Property Name CAMACHO 25 26 STATE COM	Well Number 201H
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3470'

Surface Location

UL or lot no. I	Section 25	Township 19-S	Range 27-E	Lot Idn -	Feet from the 2542'	North/South line SOUTH	Feet from the 750'	East/West line EAST	County EDDY
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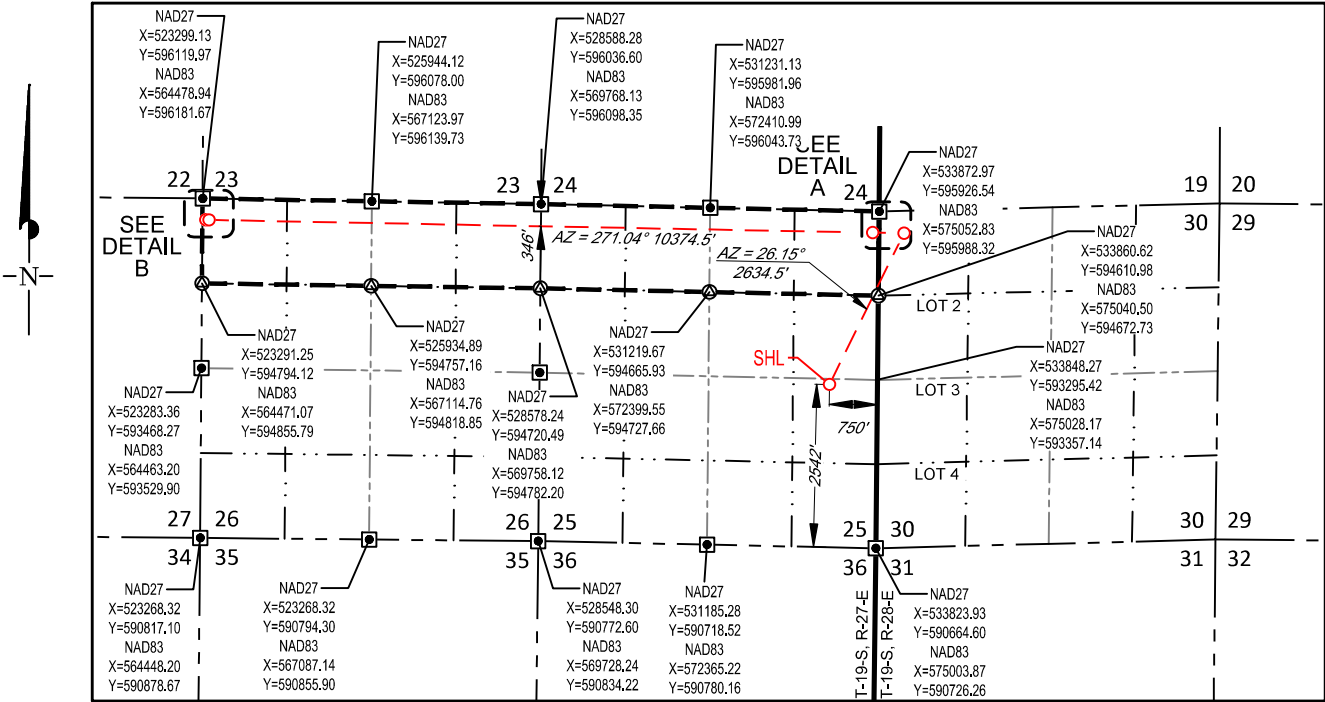
Bottom Hole Location If Different From Surface

UL or lot no. D	Section 26	Township 19-S	Range 27-E	Lot Idn -	Feet from the 333'	North/South line NORTH	Feet from the 50'	East/West line WEST	County EDDY
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Dedicated Acres 320	Joint or Infill	Consolidated Code	Order No.
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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.

SURFACE LOCATION (SHL)	KICK OFF POINT (KOP)	FIRST TAKE POINT (FTP)	LAST TAKE POINT (LTP)	BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST NAD 1983 X=574277 Y=593284 LAT.: N 32.6309416 LONG.: W 104.2263321 NAD 1927 X=533098 Y=593222 LAT.: N 32.6308251 LONG.: W 104.2258227 2542' FSL 750' FEL	NEW MEXICO EAST NAD 1983 X=575439 Y=595649 LAT.: N 32.6374384 LONG.: W 104.2225523 NAD 1927 X=534259 Y=595587 LAT.: N 32.6373220 LONG.: W 104.2220428 349' FNL 389' FWL	NEW MEXICO EAST NAD 1983 X=574950 Y=595658 LAT.: N 32.6374643 LONG.: W 104.2241404 NAD 1927 X=533770 Y=595596 LAT.: N 32.6373479 LONG.: W 104.2236309 333' FNL 100' FEL	NEW MEXICO EAST NAD 1983 X=564577 Y=595847 LAT.: N 32.6380087 LONG.: W 104.2578270 NAD 1927 X=523397 Y=595785 LAT.: N 32.6378926 LONG.: W 104.2573268 333' FNL 100' FWL	NEW MEXICO EAST NAD 1983 X=564527 Y=595848 LAT.: N 32.6380113 LONG.: W 104.2579995 NAD 1927 X=523347 Y=595786 LAT.: N 32.6378952 LONG.: W 104.25744892 333' FNL 50' FWL



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 undivided 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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sorina L Flores

Signature

5/1/24

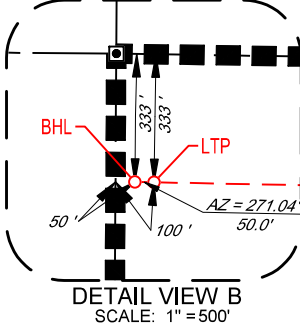
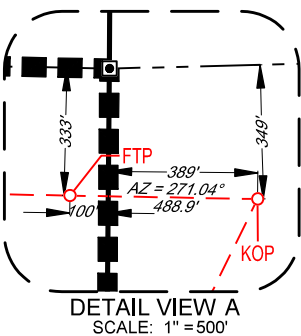
Date

Sorina L Flores

Print Name

sorina.flores@apachecorp.com

E-mail Address



SURVEYORS 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.

03/09/2024

Date of Survey

Signature and Seal of Professional Surveyor:

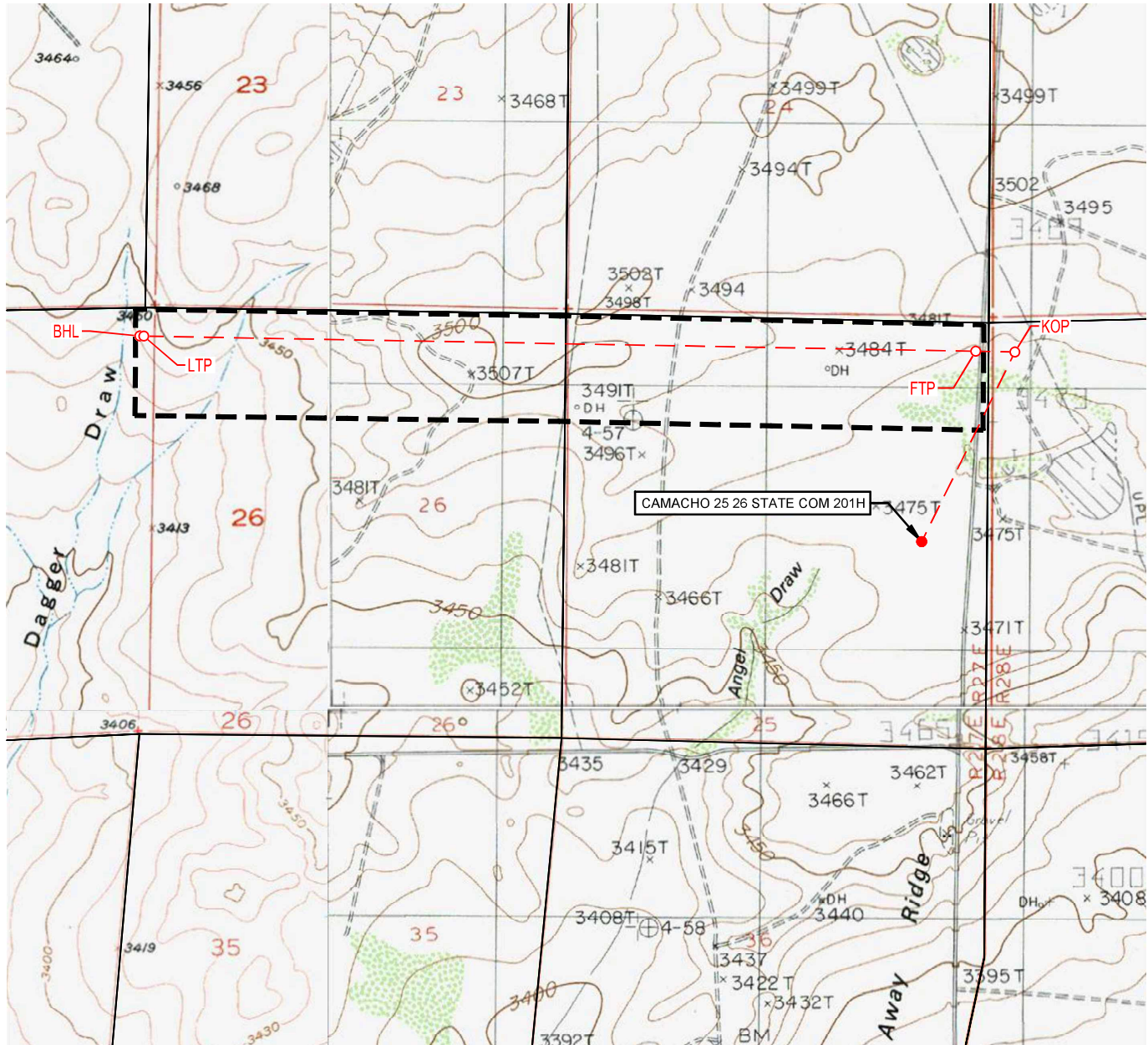
ANGEL M. BAEZA

NEW MEXICO

25116

PROFESSIONAL SURVEYOR

LOCATION & ELEVATION VERIFICATION MAP



Apache

LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 201H

SECTION 25 TWP 19-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3470'
 DESCRIPTION 2542' FSL & 750' FEL

LATITUDE N 32.6309416 LONGITUDE W 104.2263321



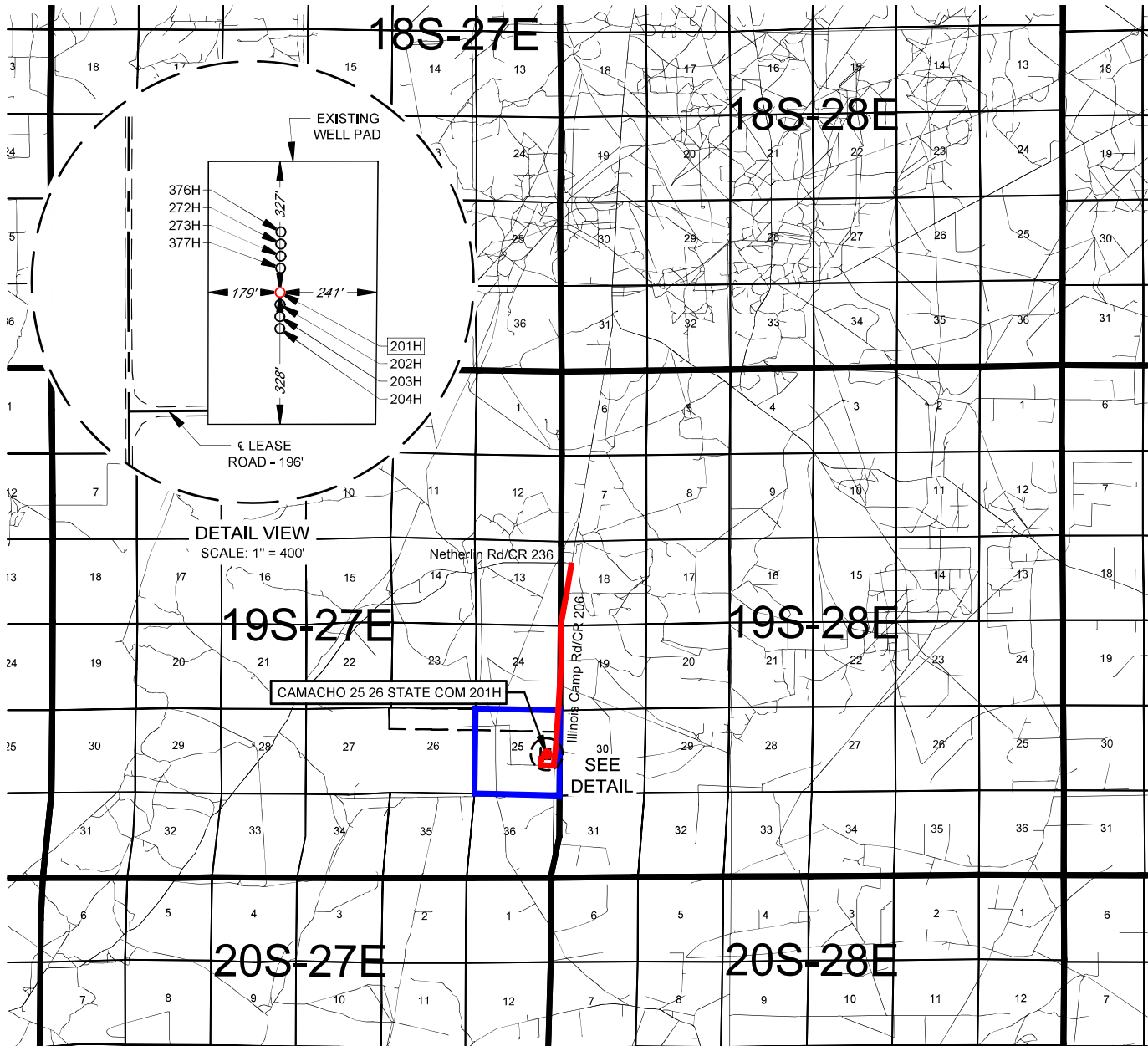
SCALE: 1" = 2000'
 0' 1000' 2000'

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY APACHE CORPORATION. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.

TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

481 WINSOFT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

EXHIBIT 2
VICINITY MAP

Apache

LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 201H

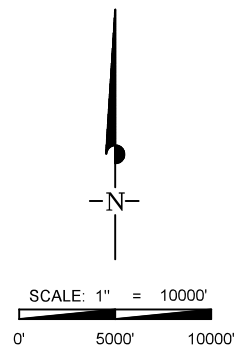
SECTION 25 TWP 19-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM
 DESCRIPTION 2542' FSL & 750' FEL

DISTANCE & DIRECTION

FROM INT. OF NETHERLIN RD/ CR-236. & ILLINOIS CAMP RD/ CR-206.
 GO SOUTH ON ILLINOIS CAMP RD/ CR-206 ±2.4 MILES. THENCE WEST
 (RIGHT) ON EDDY COMP ±0.2 MILES, THENCE NORTH (RIGHT) ON A
 LEASE RD ±488 FEET, THENCE EAST (RIGHT) ON A LEASE RD. ±196
 FEET TO A POINT ±345 FEET SOUTHWEST OF THE LOCATION.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY APACHE CORPORATION. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

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TOPOGRAPHIC

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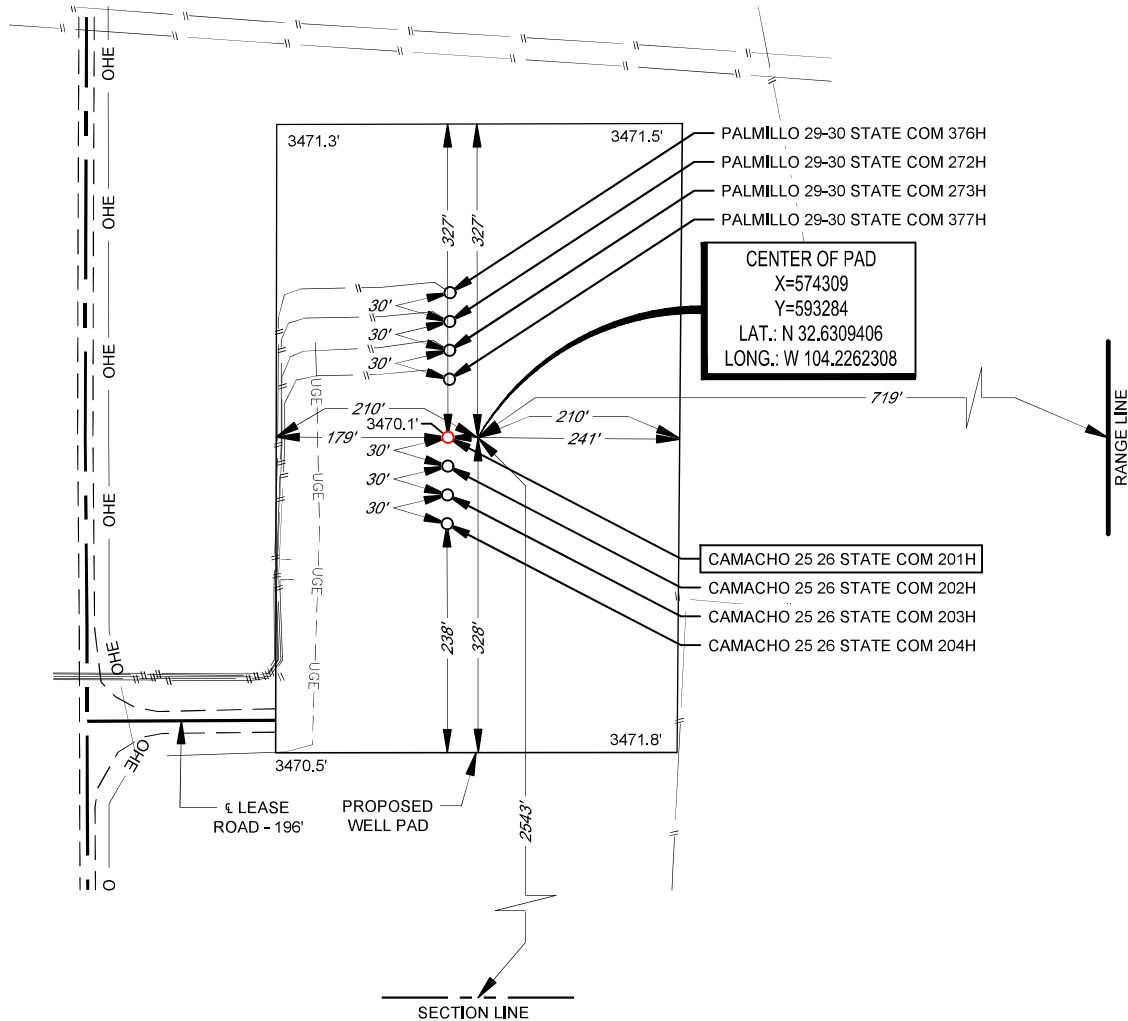


LEGEND

— — — — —	TOWNSHIP/RANGE LINE
— — — — —	SECTION LINE
— OHE —	OVERHEAD ELECTRIC
— UGE —	UNDERGROUND ELECTRIC
— — — — —	LEASE ROAD CENTERLINE
== == == ==	ROAD WAY

SECTION 25, TOWNSHIP 19-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 200'



Angel M. Baeza, P.S. No. 25116

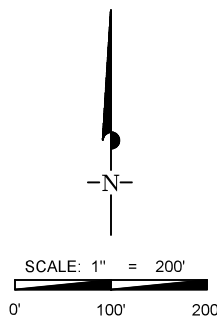
LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 201H
201H LATITUDE N 32.6309416 201H LONGITUDE W 104.2263321

CENTER OF PAD IS 2543' FSL & 719' FEL

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET, ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY APACHE CORPORATION. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO. ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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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

Form APD Conditions
Permit 362773

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: APACHE CORPORATION [873] 303 Veterans Airpark Ln Midland, TX 79705	API Number: 30-015-55003
	Well: CAMACHO 25 26 STATE COM #201H

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104
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	If cement does not circulate on any string, a CBL is required for that string 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

Apache Corporation

Eddy Co, NM (NAD83 NM E)

Camacho 25 26 (Middle)

Camacho 25-26 State Com 201H

OH

Plan: Plan #1

Standard Planning Report

01 March, 2024



Project: Eddy Co, NM (NAD83 NM E)
Site: Camacho 25 26 (Middle)
Well: Camacho 25-26 State Com 201H
Wellbore: OH
Design: Plan #1
Lat: 32.630944
Long: -104.226330
GL: 3470.00
KB: RKB=30ft @ 3500.00usft

WELLBORE TARGET DETAILS (LAT/LONG)

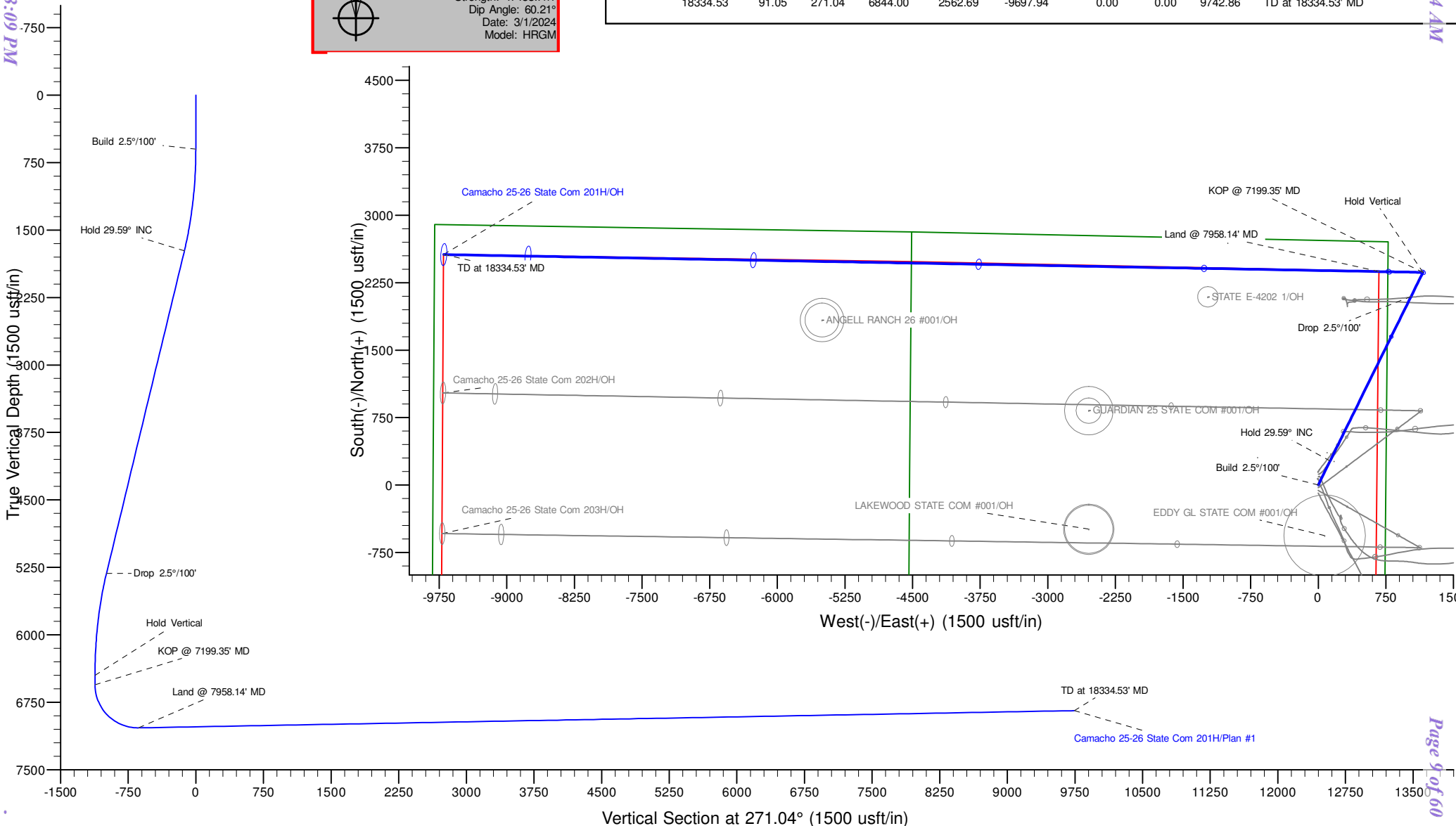
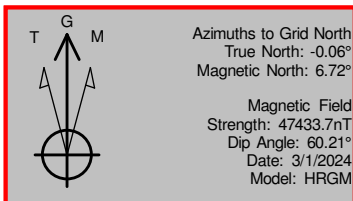
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
C201_LTP	6844.00	2562.69	-9697.94	595847.59	564580.06	Point
C201H_FTP	7035.00	2373.64	675.03	595658.54	574953.03	Point

WELL DETAILS: Camacho 25-26 State Com 201H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	593284.90	574278.00	32.630944	-104.226330

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	Build 2.5°/100'
1783.60	29.59	26.15	1731.68	268.30	131.74	2.50	26.15	-126.85	Hold 29.59° INC
5908.16	29.59	26.15	5318.32	2096.47	1029.40	0.00	0.00	-991.17	Drop 2.5°/100'
7091.75	0.00	0.00	6450.00	2364.77	1161.13	2.50	180.00	-1118.02	Hold Vertical
7199.35	0.00	0.00	6557.60	2364.77	1161.13	0.00	0.00	-1118.02	KOP @ 7199.35' MD
7958.14	91.05	271.04	7034.98	2373.64	674.96	12.00	271.04	-631.77	Land @ 7958.14' MD
18334.53	91.05	271.04	6844.00	2562.69	-9697.94	0.00	0.00	9742.86	TD at 18334.53' MD



Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Eddy Co, NM (NAD83 NM E)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Camacho 25 26 (Middle), Site Center : Camacho 25-26 State com 201H		
Site Position:		Northing:	593,284.90 usft
From:	Map	Easting:	574,278.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.630944
		Longitude:	-104.226331

Well	Camacho 25-26 State Com 201H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.06 °		
		Latitude:	32.630944
		Longitude:	-104.226331
		Ground Level:	3,470.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	3/1/2024	6.78	60.21	47,433.66847869

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	271.04	

Plan Survey Tool Program	Date	3/1/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,334.53 Plan #1 (OH)	SuperiorQC MWD+IFR1+SAG		
			OWSG MWD + IFR1 + Sag + F		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,783.60	29.59	26.15	1,731.68	268.30	131.74	2.50	2.50	0.00	26.15	
5,908.16	29.59	26.15	5,318.32	2,096.48	1,029.40	0.00	0.00	0.00	0.00	
7,091.75	0.00	0.00	6,450.00	2,364.78	1,161.13	2.50	-2.50	0.00	180.00	
7,199.35	0.00	0.00	6,557.60	2,364.78	1,161.13	0.00	0.00	0.00	0.00	
7,958.14	91.05	271.04	7,034.98	2,373.64	674.96	12.00	12.00	-11.72	271.04	
18,334.53	91.05	271.04	6,844.00	2,562.69	-9,697.94	0.00	0.00	0.00	0.00	C201_LTP

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2.5°/100'									
700.00	2.50	26.15	699.97	1.96	0.96	-0.93	2.50	2.50	0.00
800.00	5.00	26.15	799.75	7.83	3.84	-3.70	2.50	2.50	0.00
900.00	7.50	26.15	899.14	17.60	8.64	-8.32	2.50	2.50	0.00
1,000.00	10.00	26.15	997.97	31.25	15.35	-14.78	2.50	2.50	0.00
1,100.00	12.50	26.15	1,096.04	48.76	23.94	-23.05	2.50	2.50	0.00
1,200.00	15.00	26.15	1,193.17	70.10	34.42	-33.14	2.50	2.50	0.00
1,300.00	17.50	26.15	1,289.17	95.21	46.75	-45.02	2.50	2.50	0.00
1,400.00	20.00	26.15	1,383.85	124.07	60.92	-58.66	2.50	2.50	0.00
1,500.00	22.50	26.15	1,477.05	156.60	76.89	-74.04	2.50	2.50	0.00
1,600.00	25.00	26.15	1,568.57	192.75	94.64	-91.13	2.50	2.50	0.00
1,700.00	27.50	26.15	1,658.25	232.44	114.13	-109.90	2.50	2.50	0.00
1,783.60	29.59	26.15	1,731.68	268.30	131.74	-126.85	2.50	2.50	0.00
Hold 29.59° INC									
1,800.00	29.59	26.15	1,745.94	275.57	135.31	-130.28	0.00	0.00	0.00
1,900.00	29.59	26.15	1,832.90	319.89	157.07	-151.24	0.00	0.00	0.00
2,000.00	29.59	26.15	1,919.86	364.22	178.84	-172.20	0.00	0.00	0.00
2,100.00	29.59	26.15	2,006.82	408.54	200.60	-193.15	0.00	0.00	0.00
2,200.00	29.59	26.15	2,093.78	452.87	222.36	-214.11	0.00	0.00	0.00
2,300.00	29.59	26.15	2,180.73	497.19	244.13	-235.06	0.00	0.00	0.00
2,400.00	29.59	26.15	2,267.69	541.51	265.89	-256.02	0.00	0.00	0.00
2,500.00	29.59	26.15	2,354.65	585.84	287.65	-276.97	0.00	0.00	0.00
2,600.00	29.59	26.15	2,441.61	630.16	309.42	-297.93	0.00	0.00	0.00
2,700.00	29.59	26.15	2,528.57	674.49	331.18	-318.88	0.00	0.00	0.00
2,800.00	29.59	26.15	2,615.53	718.81	352.95	-339.84	0.00	0.00	0.00
2,900.00	29.59	26.15	2,702.48	763.14	374.71	-360.80	0.00	0.00	0.00
3,000.00	29.59	26.15	2,789.44	807.46	396.47	-381.75	0.00	0.00	0.00
3,100.00	29.59	26.15	2,876.40	851.78	418.24	-402.71	0.00	0.00	0.00
3,200.00	29.59	26.15	2,963.36	896.11	440.00	-423.66	0.00	0.00	0.00
3,300.00	29.59	26.15	3,050.32	940.43	461.76	-444.62	0.00	0.00	0.00
3,400.00	29.59	26.15	3,137.27	984.76	483.53	-465.57	0.00	0.00	0.00
3,500.00	29.59	26.15	3,224.23	1,029.08	505.29	-486.53	0.00	0.00	0.00
3,600.00	29.59	26.15	3,311.19	1,073.40	527.06	-507.49	0.00	0.00	0.00
3,700.00	29.59	26.15	3,398.15	1,117.73	548.82	-528.44	0.00	0.00	0.00
3,800.00	29.59	26.15	3,485.11	1,162.05	570.58	-549.40	0.00	0.00	0.00
3,900.00	29.59	26.15	3,572.06	1,206.38	592.35	-570.35	0.00	0.00	0.00
4,000.00	29.59	26.15	3,659.02	1,250.70	614.11	-591.31	0.00	0.00	0.00
4,100.00	29.59	26.15	3,745.98	1,295.03	635.87	-612.26	0.00	0.00	0.00
4,200.00	29.59	26.15	3,832.94	1,339.35	657.64	-633.22	0.00	0.00	0.00
4,300.00	29.59	26.15	3,919.90	1,383.67	679.40	-654.17	0.00	0.00	0.00
4,400.00	29.59	26.15	4,006.85	1,428.00	701.16	-675.13	0.00	0.00	0.00
4,500.00	29.59	26.15	4,093.81	1,472.32	722.93	-696.09	0.00	0.00	0.00
4,600.00	29.59	26.15	4,180.77	1,516.65	744.69	-717.04	0.00	0.00	0.00
4,700.00	29.59	26.15	4,267.73	1,560.97	766.46	-738.00	0.00	0.00	0.00
4,800.00	29.59	26.15	4,354.69	1,605.29	788.22	-758.95	0.00	0.00	0.00
4,900.00	29.59	26.15	4,441.65	1,649.62	809.98	-779.91	0.00	0.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.00	29.59	26.15	4,528.60	1,693.94	831.75	-800.86	0.00	0.00	0.00
5,100.00	29.59	26.15	4,615.56	1,738.27	853.51	-821.82	0.00	0.00	0.00
5,200.00	29.59	26.15	4,702.52	1,782.59	875.27	-842.78	0.00	0.00	0.00
5,300.00	29.59	26.15	4,789.48	1,826.92	897.04	-863.73	0.00	0.00	0.00
5,400.00	29.59	26.15	4,876.44	1,871.24	918.80	-884.69	0.00	0.00	0.00
5,500.00	29.59	26.15	4,963.39	1,915.56	940.57	-905.64	0.00	0.00	0.00
5,600.00	29.59	26.15	5,050.35	1,959.89	962.33	-926.60	0.00	0.00	0.00
5,700.00	29.59	26.15	5,137.31	2,004.21	984.09	-947.55	0.00	0.00	0.00
5,800.00	29.59	26.15	5,224.27	2,048.54	1,005.86	-968.51	0.00	0.00	0.00
5,908.16	29.59	26.15	5,318.32	2,096.48	1,029.40	-991.17	0.00	0.00	0.00
Drop 2.5°/100'									
6,000.00	27.29	26.15	5,399.07	2,135.74	1,048.67	-1,009.74	2.50	-2.50	0.00
6,100.00	24.79	26.15	5,488.91	2,175.15	1,068.02	-1,028.37	2.50	-2.50	0.00
6,200.00	22.29	26.15	5,580.58	2,211.00	1,085.63	-1,045.32	2.50	-2.50	0.00
6,300.00	19.79	26.15	5,673.90	2,243.23	1,101.45	-1,060.56	2.50	-2.50	0.00
6,400.00	17.29	26.15	5,768.70	2,271.77	1,115.47	-1,074.05	2.50	-2.50	0.00
6,500.00	14.79	26.15	5,864.80	2,296.58	1,127.65	-1,085.78	2.50	-2.50	0.00
6,600.00	12.29	26.15	5,962.01	2,317.60	1,137.97	-1,095.72	2.50	-2.50	0.00
6,700.00	9.79	26.15	6,060.15	2,334.79	1,146.41	-1,103.85	2.50	-2.50	0.00
6,800.00	7.29	26.15	6,159.03	2,348.13	1,152.96	-1,110.15	2.50	-2.50	0.00
6,900.00	4.79	26.15	6,258.47	2,357.58	1,157.60	-1,114.62	2.50	-2.50	0.00
7,000.00	2.29	26.15	6,358.27	2,363.13	1,160.32	-1,117.24	2.50	-2.50	0.00
7,091.75	0.00	0.00	6,450.00	2,364.78	1,161.13	-1,118.02	2.50	-2.50	-28.50
Hold Vertical									
7,100.00	0.00	0.00	6,458.25	2,364.78	1,161.13	-1,118.02	0.00	0.00	0.00
7,199.35	0.00	0.00	6,557.60	2,364.78	1,161.13	-1,118.02	0.00	0.00	0.00
KOP @ 7199.35' MD									
7,225.00	3.08	271.04	6,583.23	2,364.79	1,160.45	-1,117.33	12.00	12.00	0.00
7,250.00	6.08	271.04	6,608.15	2,364.82	1,158.45	-1,115.34	12.00	12.00	0.00
7,275.00	9.08	271.04	6,632.93	2,364.88	1,155.16	-1,112.04	12.00	12.00	0.00
7,300.00	12.08	271.04	6,657.50	2,364.97	1,150.57	-1,107.45	12.00	12.00	0.00
7,325.00	15.08	271.04	6,681.80	2,365.07	1,144.70	-1,101.58	12.00	12.00	0.00
7,350.00	18.08	271.04	6,705.76	2,365.20	1,137.57	-1,094.45	12.00	12.00	0.00
7,375.00	21.08	271.04	6,729.31	2,365.36	1,129.19	-1,086.08	12.00	12.00	0.00
7,400.00	24.08	271.04	6,752.39	2,365.53	1,119.60	-1,076.48	12.00	12.00	0.00
7,425.00	27.08	271.04	6,774.94	2,365.73	1,108.81	-1,065.69	12.00	12.00	0.00
7,450.00	30.08	271.04	6,796.89	2,365.95	1,096.85	-1,053.73	12.00	12.00	0.00
7,475.00	33.08	271.04	6,818.19	2,366.19	1,083.77	-1,040.64	12.00	12.00	0.00
7,500.00	36.08	271.04	6,838.77	2,366.44	1,069.58	-1,026.45	12.00	12.00	0.00
7,525.00	39.08	271.04	6,858.58	2,366.72	1,054.34	-1,011.21	12.00	12.00	0.00
7,550.00	42.08	271.04	6,877.57	2,367.02	1,038.08	-994.95	12.00	12.00	0.00
7,575.00	45.08	271.04	6,895.68	2,367.33	1,020.85	-977.72	12.00	12.00	0.00
7,600.00	48.08	271.04	6,912.86	2,367.66	1,002.70	-959.56	12.00	12.00	0.00
7,625.00	51.08	271.04	6,929.07	2,368.01	983.67	-940.53	12.00	12.00	0.00
7,650.00	54.08	271.04	6,944.26	2,368.37	963.83	-920.68	12.00	12.00	0.00
7,675.00	57.08	271.04	6,958.39	2,368.75	943.21	-900.06	12.00	12.00	0.00
7,700.00	60.08	271.04	6,971.42	2,369.14	921.88	-878.73	12.00	12.00	0.00
7,725.00	63.08	271.04	6,983.32	2,369.54	899.90	-856.74	12.00	12.00	0.00
7,750.00	66.08	271.04	6,994.05	2,369.95	877.33	-834.17	12.00	12.00	0.00
7,775.00	69.08	271.04	7,003.58	2,370.37	854.22	-811.06	12.00	12.00	0.00
7,800.00	72.08	271.04	7,011.89	2,370.80	830.65	-787.49	12.00	12.00	0.00
7,825.00	75.08	271.04	7,018.96	2,371.24	806.68	-763.51	12.00	12.00	0.00
7,850.00	78.08	271.04	7,024.76	2,371.68	782.37	-739.19	12.00	12.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,875.00	81.08	271.04	7,029.29	2,372.13	757.79	-714.61	12.00	12.00	0.00
7,900.00	84.08	271.04	7,032.52	2,372.58	733.01	-689.82	12.00	12.00	0.00
7,925.00	87.08	271.04	7,034.44	2,373.03	708.09	-664.90	12.00	12.00	0.00
7,950.00	90.08	271.04	7,035.06	2,373.49	683.10	-639.91	12.00	12.00	0.00
7,958.14	91.05	271.04	7,034.98	2,373.64	674.96	-631.77	12.00	12.00	0.00
Land @ 7958.14' MD									
8,000.00	91.05	271.04	7,034.21	2,374.40	633.12	-589.92	0.00	0.00	0.00
8,100.00	91.05	271.04	7,032.37	2,376.22	533.15	-489.93	0.00	0.00	0.00
8,200.00	91.05	271.04	7,030.53	2,378.04	433.18	-389.95	0.00	0.00	0.00
8,300.00	91.05	271.04	7,028.69	2,379.86	333.22	-289.97	0.00	0.00	0.00
8,400.00	91.05	271.04	7,026.85	2,381.69	233.25	-189.98	0.00	0.00	0.00
8,500.00	91.05	271.04	7,025.01	2,383.51	133.29	-90.00	0.00	0.00	0.00
8,600.00	91.05	271.04	7,023.17	2,385.33	33.32	9.98	0.00	0.00	0.00
8,700.00	91.05	271.04	7,021.33	2,387.15	-66.65	109.96	0.00	0.00	0.00
8,800.00	91.05	271.04	7,019.49	2,388.97	-166.61	209.95	0.00	0.00	0.00
8,900.00	91.05	271.04	7,017.65	2,390.80	-266.58	309.93	0.00	0.00	0.00
9,000.00	91.05	271.04	7,015.81	2,392.62	-366.55	409.91	0.00	0.00	0.00
9,100.00	91.05	271.04	7,013.97	2,394.44	-466.51	509.90	0.00	0.00	0.00
9,200.00	91.05	271.04	7,012.13	2,396.26	-566.48	609.88	0.00	0.00	0.00
9,300.00	91.05	271.04	7,010.29	2,398.08	-666.45	709.86	0.00	0.00	0.00
9,400.00	91.05	271.04	7,008.44	2,399.91	-766.41	809.85	0.00	0.00	0.00
9,500.00	91.05	271.04	7,006.60	2,401.73	-866.38	909.83	0.00	0.00	0.00
9,600.00	91.05	271.04	7,004.76	2,403.55	-966.35	1,009.81	0.00	0.00	0.00
9,700.00	91.05	271.04	7,002.92	2,405.37	-1,066.31	1,109.79	0.00	0.00	0.00
9,800.00	91.05	271.04	7,001.08	2,407.19	-1,166.28	1,209.78	0.00	0.00	0.00
9,900.00	91.05	271.04	6,999.24	2,409.02	-1,266.25	1,309.76	0.00	0.00	0.00
10,000.00	91.05	271.04	6,997.40	2,410.84	-1,366.21	1,409.74	0.00	0.00	0.00
10,100.00	91.05	271.04	6,995.56	2,412.66	-1,466.18	1,509.73	0.00	0.00	0.00
10,200.00	91.05	271.04	6,993.72	2,414.48	-1,566.14	1,609.71	0.00	0.00	0.00
10,300.00	91.05	271.04	6,991.88	2,416.30	-1,666.11	1,709.69	0.00	0.00	0.00
10,400.00	91.05	271.04	6,990.04	2,418.12	-1,766.08	1,809.68	0.00	0.00	0.00
10,500.00	91.05	271.04	6,988.20	2,419.95	-1,866.04	1,909.66	0.00	0.00	0.00
10,600.00	91.05	271.04	6,986.36	2,421.77	-1,966.01	2,009.64	0.00	0.00	0.00
10,700.00	91.05	271.04	6,984.52	2,423.59	-2,065.98	2,109.63	0.00	0.00	0.00
10,800.00	91.05	271.04	6,982.68	2,425.41	-2,165.94	2,209.61	0.00	0.00	0.00
10,900.00	91.05	271.04	6,980.84	2,427.23	-2,265.91	2,309.59	0.00	0.00	0.00
11,000.00	91.05	271.04	6,979.00	2,429.06	-2,365.88	2,409.57	0.00	0.00	0.00
11,100.00	91.05	271.04	6,977.16	2,430.88	-2,465.84	2,509.56	0.00	0.00	0.00
11,200.00	91.05	271.04	6,975.31	2,432.70	-2,565.81	2,609.54	0.00	0.00	0.00
11,300.00	91.05	271.04	6,973.47	2,434.52	-2,665.78	2,709.52	0.00	0.00	0.00
11,400.00	91.05	271.04	6,971.63	2,436.34	-2,765.74	2,809.51	0.00	0.00	0.00
11,500.00	91.05	271.04	6,969.79	2,438.17	-2,865.71	2,909.49	0.00	0.00	0.00
11,600.00	91.05	271.04	6,967.95	2,439.99	-2,965.67	3,009.47	0.00	0.00	0.00
11,700.00	91.05	271.04	6,966.11	2,441.81	-3,065.64	3,109.46	0.00	0.00	0.00
11,800.00	91.05	271.04	6,964.27	2,443.63	-3,165.61	3,209.44	0.00	0.00	0.00
11,900.00	91.05	271.04	6,962.43	2,445.45	-3,265.57	3,309.42	0.00	0.00	0.00
12,000.00	91.05	271.04	6,960.59	2,447.28	-3,365.54	3,409.41	0.00	0.00	0.00
12,100.00	91.05	271.04	6,958.75	2,449.10	-3,465.51	3,509.39	0.00	0.00	0.00
12,200.00	91.05	271.04	6,956.91	2,450.92	-3,565.47	3,609.37	0.00	0.00	0.00
12,300.00	91.05	271.04	6,955.07	2,452.74	-3,665.44	3,709.35	0.00	0.00	0.00
12,400.00	91.05	271.04	6,953.23	2,454.56	-3,765.41	3,809.34	0.00	0.00	0.00
12,500.00	91.05	271.04	6,951.39	2,456.39	-3,865.37	3,909.32	0.00	0.00	0.00
12,600.00	91.05	271.04	6,949.55	2,458.21	-3,965.34	4,009.30	0.00	0.00	0.00
12,700.00	91.05	271.04	6,947.71	2,460.03	-4,065.31	4,109.29	0.00	0.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,800.00	91.05	271.04	6,945.87	2,461.85	-4,165.27	4,209.27	0.00	0.00	0.00	
12,900.00	91.05	271.04	6,944.03	2,463.67	-4,265.24	4,309.25	0.00	0.00	0.00	
13,000.00	91.05	271.04	6,942.19	2,465.50	-4,365.21	4,409.24	0.00	0.00	0.00	
13,100.00	91.05	271.04	6,940.34	2,467.32	-4,465.17	4,509.22	0.00	0.00	0.00	
13,200.00	91.05	271.04	6,938.50	2,469.14	-4,565.14	4,609.20	0.00	0.00	0.00	
13,300.00	91.05	271.04	6,936.66	2,470.96	-4,665.10	4,709.19	0.00	0.00	0.00	
13,400.00	91.05	271.04	6,934.82	2,472.78	-4,765.07	4,809.17	0.00	0.00	0.00	
13,500.00	91.05	271.04	6,932.98	2,474.61	-4,865.04	4,909.15	0.00	0.00	0.00	
13,600.00	91.05	271.04	6,931.14	2,476.43	-4,965.00	5,009.13	0.00	0.00	0.00	
13,700.00	91.05	271.04	6,929.30	2,478.25	-5,064.97	5,109.12	0.00	0.00	0.00	
13,800.00	91.05	271.04	6,927.46	2,480.07	-5,164.94	5,209.10	0.00	0.00	0.00	
13,900.00	91.05	271.04	6,925.62	2,481.89	-5,264.90	5,309.08	0.00	0.00	0.00	
14,000.00	91.05	271.04	6,923.78	2,483.71	-5,364.87	5,409.07	0.00	0.00	0.00	
14,100.00	91.05	271.04	6,921.94	2,485.54	-5,464.84	5,509.05	0.00	0.00	0.00	
14,200.00	91.05	271.04	6,920.10	2,487.36	-5,564.80	5,609.03	0.00	0.00	0.00	
14,300.00	91.05	271.04	6,918.26	2,489.18	-5,664.77	5,709.02	0.00	0.00	0.00	
14,400.00	91.05	271.04	6,916.42	2,491.00	-5,764.74	5,809.00	0.00	0.00	0.00	
14,500.00	91.05	271.04	6,914.58	2,492.82	-5,864.70	5,908.98	0.00	0.00	0.00	
14,600.00	91.05	271.04	6,912.74	2,494.65	-5,964.67	6,008.97	0.00	0.00	0.00	
14,700.00	91.05	271.04	6,910.90	2,496.47	-6,064.64	6,108.95	0.00	0.00	0.00	
14,800.00	91.05	271.04	6,909.06	2,498.29	-6,164.60	6,208.93	0.00	0.00	0.00	
14,900.00	91.05	271.04	6,907.21	2,500.11	-6,264.57	6,308.91	0.00	0.00	0.00	
15,000.00	91.05	271.04	6,905.37	2,501.93	-6,364.53	6,408.90	0.00	0.00	0.00	
15,100.00	91.05	271.04	6,903.53	2,503.76	-6,464.50	6,508.88	0.00	0.00	0.00	
15,200.00	91.05	271.04	6,901.69	2,505.58	-6,564.47	6,608.86	0.00	0.00	0.00	
15,300.00	91.05	271.04	6,899.85	2,507.40	-6,664.43	6,708.85	0.00	0.00	0.00	
15,400.00	91.05	271.04	6,898.01	2,509.22	-6,764.40	6,808.83	0.00	0.00	0.00	
15,500.00	91.05	271.04	6,896.17	2,511.04	-6,864.37	6,908.81	0.00	0.00	0.00	
15,600.00	91.05	271.04	6,894.33	2,512.87	-6,964.33	7,008.80	0.00	0.00	0.00	
15,700.00	91.05	271.04	6,892.49	2,514.69	-7,064.30	7,108.78	0.00	0.00	0.00	
15,800.00	91.05	271.04	6,890.65	2,516.51	-7,164.27	7,208.76	0.00	0.00	0.00	
15,900.00	91.05	271.04	6,888.81	2,518.33	-7,264.23	7,308.74	0.00	0.00	0.00	
16,000.00	91.05	271.04	6,886.97	2,520.15	-7,364.20	7,408.73	0.00	0.00	0.00	
16,100.00	91.05	271.04	6,885.13	2,521.98	-7,464.17	7,508.71	0.00	0.00	0.00	
16,200.00	91.05	271.04	6,883.29	2,523.80	-7,564.13	7,608.69	0.00	0.00	0.00	
16,300.00	91.05	271.04	6,881.45	2,525.62	-7,664.10	7,708.68	0.00	0.00	0.00	
16,400.00	91.05	271.04	6,879.61	2,527.44	-7,764.07	7,808.66	0.00	0.00	0.00	
16,500.00	91.05	271.04	6,877.77	2,529.26	-7,864.03	7,908.64	0.00	0.00	0.00	
16,600.00	91.05	271.04	6,875.93	2,531.09	-7,964.00	8,008.63	0.00	0.00	0.00	
16,700.00	91.05	271.04	6,874.08	2,532.91	-8,063.96	8,108.61	0.00	0.00	0.00	
16,800.00	91.05	271.04	6,872.24	2,534.73	-8,163.93	8,208.59	0.00	0.00	0.00	
16,900.00	91.05	271.04	6,870.40	2,536.55	-8,263.90	8,308.58	0.00	0.00	0.00	
17,000.00	91.05	271.04	6,868.56	2,538.37	-8,363.86	8,408.56	0.00	0.00	0.00	
17,100.00	91.05	271.04	6,866.72	2,540.19	-8,463.83	8,508.54	0.00	0.00	0.00	
17,200.00	91.05	271.04	6,864.88	2,542.02	-8,563.80	8,608.52	0.00	0.00	0.00	
17,300.00	91.05	271.04	6,863.04	2,543.84	-8,663.76	8,708.51	0.00	0.00	0.00	
17,400.00	91.05	271.04	6,861.20	2,545.66	-8,763.73	8,808.49	0.00	0.00	0.00	
17,500.00	91.05	271.04	6,859.36	2,547.48	-8,863.70	8,908.47	0.00	0.00	0.00	
17,600.00	91.05	271.04	6,857.52	2,549.30	-8,963.66	9,008.46	0.00	0.00	0.00	
17,700.00	91.05	271.04	6,855.68	2,551.13	-9,063.63	9,108.44	0.00	0.00	0.00	
17,800.00	91.05	271.04	6,853.84	2,552.95	-9,163.60	9,208.42	0.00	0.00	0.00	
17,900.00	91.05	271.04	6,852.00	2,554.77	-9,263.56	9,308.41	0.00	0.00	0.00	
18,000.00	91.05	271.04	6,850.16	2,556.59	-9,363.53	9,408.39	0.00	0.00	0.00	
18,100.00	91.05	271.04	6,848.32	2,558.41	-9,463.49	9,508.37	0.00	0.00	0.00	

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Company:	Apache Corporation	TVD Reference:	RKB=30ft @ 3500.00usft
Project:	Eddy Co, NM (NAD83 NM E)	MD Reference:	RKB=30ft @ 3500.00usft
Site:	Camacho 25 26 (Middle)	North Reference:	Grid
Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,200.00	91.05	271.04	6,846.48	2,560.24	-9,563.46	9,608.36	0.00	0.00	0.00
18,300.00	91.05	271.04	6,844.64	2,562.06	-9,663.43	9,708.34	0.00	0.00	0.00
18,334.53	91.05	271.04	6,844.00	2,562.69	-9,697.94	9,742.86	0.00	0.00	0.00
TD at 18334.53' MD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
C201_LTP	0.00	0.00	6,844.00	2,562.69	-9,697.94	595,847.59	564,580.06	32.638011	-104.257827
- plan hits target center									
- Point									
C201H_FTP	0.00	0.00	7,035.00	2,373.64	675.03	595,658.54	574,953.03	32.637467	-104.224130
- plan misses target center by 0.02usft at 7958.07usft MD (7034.98 TVD, 2373.63 N, 675.03 E)									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
600.00	600.00	0.00	0.00	Build 2.5°/100'
1,783.60	1,731.68	268.30	131.74	Hold 29.59° INC
5,908.16	5,318.32	2,096.48	1,029.40	Drop 2.5°/100'
7,091.75	6,450.00	2,364.78	1,161.13	Hold Vertical
7,199.35	6,557.60	2,364.78	1,161.13	KOP @ 7199.35' MD
7,958.14	7,034.98	2,373.64	674.96	Land @ 7958.14' MD
18,334.53	6,844.00	2,562.69	-9,697.94	TD at 18334.53' MD

Apache Corporation

Eddy Co, NM (NAD83 NM E)

Camacho 25 26 (Middle)

Camacho 25-26 State Com 201H

OH

Plan #1

Anticollision Report

01 March, 2024

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,500.00usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	3/1/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	18,334.53	Plan #1 (OH)	SuperiorQC MWD+IFR1+SA	OWSG MWD + IFR1 + Sag + FDIR Correction

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Camacho 25 26 (Middle)						
Camacho 25-26 State Com 202H - OH - Plan #1	600.00	600.00	29.90	25.81	7.317	CC, ES
Camacho 25-26 State Com 202H - OH - Plan #1	800.00	801.23	33.56	28.05	6.088	SF
Camacho 25-26 State Com 203H - OH - Plan #1	600.00	600.00	60.00	55.92	14.683	CC, ES
Camacho 25-26 State Com 203H - OH - Plan #1	800.00	797.40	71.22	65.74	12.990	SF
Camacho 25-26 State Com 204H - OH - Plan #1	600.00	600.00	89.90	85.82	22.000	CC, ES
Camacho 25-26 State Com 204H - OH - Plan #1	800.00	792.22	105.14	99.68	19.272	SF
Camacho 25 26 Offsets						
ANGELL RANCH 26 #001 - OH - OH	14,126.14	6,934.43	650.72	425.33	2.887	CC, ES, SF
EDDY GL STATE COM #001 - OH - OH	600.00	563.50	566.21	536.57	19.105	CC
EDDY GL STATE COM #001 - OH - OH	700.00	663.47	568.03	533.98	16.683	ES
EDDY GL STATE COM #001 - OH - OH	1,700.00	1,621.75	795.27	719.02	10.431	SF
GUARDIAN 25 STATE COM #001 - OH - OH	11,149.68	6,962.74	1,605.00	1,391.72	7.526	CC, ES
GUARDIAN 25 STATE COM #001 - OH - OH	11,200.00	6,961.81	1,605.78	1,392.16	7.517	SF
LAKEWOOD STATE COM #001 - OH - OH						Out of range
Palmillo 29-30 271H - OH - OH	7,775.00	7,216.40	332.75	280.67	6.389	SF
Palmillo 29-30 271H - OH - OH	7,800.00	7,199.53	331.94	280.05	6.396	ES
Palmillo 29-30 271H - OH - OH	7,810.33	7,192.66	331.87	280.06	6.405	CC
Palmillo 29-30 272H - OH - OH	1,517.53	1,498.48	17.05	6.59	1.629	Collision Risk Procedures R
Palmillo 29-30 273H - OH - OH	1,234.26	1,227.97	12.64	4.27	1.510	Collision Risk Procedures R
Palmillo 29-30 274H - OH - OH	610.30	602.13	2,149.81	2,145.70	524.095	CC, ES
Palmillo 29-30 274H - OH - OH	1,900.00	1,739.79	2,483.30	2,470.66	196.467	SF
Palmillo 29-30 375H - OH - OH	8,325.84	7,033.02	309.94	258.04	5.973	CC, ES, SF
Palmillo 29-30 376H - OH - OH	1,370.38	1,351.81	63.47	54.15	6.809	CC, ES
Palmillo 29-30 376H - OH - OH	1,400.00	1,380.08	64.07	54.54	6.726	SF
Palmillo 29-30 377H - OH - OH	1,125.06	1,120.18	32.31	24.68	4.232	CC, ES, SF
Palmillo 29-30 378H - OH - OH	171.03	155.33	2,119.91	2,118.95	2,203.184	CC
Palmillo 29-30 378H - OH - OH	600.00	571.51	2,121.94	2,117.98	536.512	ES
Palmillo 29-30 378H - OH - OH	2,000.00	1,935.84	2,483.72	2,469.98	180.849	SF
STATE E-4202 1 - OH - OH	3,100.00	2,654.00	2,068.41	1,943.35	16.540	SF
STATE E-4202 1 - OH - OH	3,116.60	2,654.00	2,068.34	1,943.29	16.541	CC, ES
WHITE THORN 26 STATE COM #001 - OH - OH						Out of range

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 202H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-179.62	-29.90	-0.20	29.90	29.40	0.50	59.580		
100.00	100.00	100.00	100.00	0.25	0.25	-179.62	-29.90	-0.20	29.90	28.68	1.22	24.533		
200.00	200.00	200.00	200.00	0.61	0.61	-179.62	-29.90	-0.20	29.90	27.96	1.94	15.447		
300.00	300.00	300.00	300.00	0.97	0.97	-179.62	-29.90	-0.20	29.90	27.25	2.65	11.272		
400.00	400.00	400.00	400.00	1.33	1.33	-179.62	-29.90	-0.20	29.90	27.08	2.82	10.597		
423.56	423.56	423.56	423.56	1.41	1.41	-179.62	-29.90	-0.20	29.90	26.53	3.37	8.874		
500.00	500.00	500.00	500.00	1.68	1.68	-179.62	-29.90	-0.20	29.90	26.29	3.61	8.286		
533.33	533.33	533.33	533.33	1.80	1.80	-179.62	-29.90	-0.20	29.90	25.81	4.09	7.317 CC, ES		
600.00	600.00	600.00	600.00	2.04	2.04	-179.62	-29.90	-0.20	29.90	26.01	4.80	6.416		
700.00	699.97	700.63	700.61	2.40	2.40	153.38	-28.84	1.22	30.81	28.05	5.51	6.088 SF		
800.00	799.75	801.23	801.07	2.76	2.76	151.09	-25.67	5.46	33.56	6.23	6.143			
900.00	899.14	901.78	901.22	3.12	3.12	148.01	-20.39	12.52	38.25	37.99	6.94	6.473		
1,000.00	997.97	1,002.24	1,000.92	3.48	3.48	144.79	-13.02	22.38	44.93	45.99	7.66	7.004		
1,100.00	1,096.04	1,102.60	1,100.02	3.84	3.84	141.80	-3.57	35.02	53.65	56.02	8.38	7.684		
1,200.00	1,193.17	1,202.82	1,198.38	4.20	4.20	139.24	7.93	50.42	64.41	68.08	9.11	8.473		
1,300.00	1,289.17	1,302.89	1,295.86	4.56	4.57	137.09	21.46	68.52	77.19	82.13	9.85	9.341		
1,400.00	1,383.85	1,402.77	1,392.31	4.94	4.94	135.32	37.00	89.31	91.97	98.54	10.59	10.307		
1,500.00	1,477.05	1,501.43	1,486.99	5.32	5.31	134.50	53.58	111.50	109.13	117.97	11.33	11.413		
1,600.00	1,568.57	1,599.34	1,580.96	5.71	5.68	135.16	70.06	133.55	129.30	140.52	12.07	12.645		
1,700.00	1,658.25	1,696.48	1,674.17	6.11	6.05	136.66	86.42	155.43	152.59	161.89	12.68	13.768		
1,783.60	1,731.68	1,776.95	1,751.40	6.45	6.36	138.23	99.96	173.56	174.57	166.32	12.80	13.993		
1,800.00	1,745.94	1,792.66	1,766.48	6.52	6.43	138.63	102.61	177.09	179.12	193.47	13.53	15.303		
1,900.00	1,832.90	1,888.47	1,858.42	6.94	6.80	140.65	118.73	198.67	207.00	220.80	14.26	16.487		
2,000.00	1,919.86	1,984.29	1,950.37	7.37	7.17	142.19	134.86	220.25	235.05	248.24	14.99	17.558		
2,100.00	2,006.82	2,080.10	2,042.32	7.80	7.55	143.41	150.99	241.83	263.24	275.78	15.73	18.531		
2,200.00	2,093.78	2,175.91	2,134.26	8.24	7.92	144.39	167.12	263.41	291.51	303.37	16.47	19.416		
2,300.00	2,180.73	2,271.72	2,226.21	8.69	8.30	145.20	183.25	284.99	319.84	331.01	17.22	20.225		
2,400.00	2,267.69	2,367.54	2,318.16	9.14	8.68	145.87	199.37	306.57	348.23	358.68	17.96	20.966		
2,500.00	2,354.65	2,463.35	2,410.11	9.59	9.06	146.45	215.50	328.15	376.65	386.39	18.71	21.646		
2,600.00	2,441.61	2,559.16	2,502.05	10.04	9.44	146.94	231.63	349.73	405.10	414.11	19.47	22.274		
2,700.00	2,528.57	2,654.98	2,594.00	10.50	9.82	147.37	247.76	371.31	433.58	441.85	20.22	22.853		
2,800.00	2,615.53	2,750.79	2,685.95	10.96	10.20	147.75	263.89	392.89	462.07	469.61	20.97	23.390		
2,900.00	2,702.48	2,846.60	2,777.89	11.42	10.59	148.08	280.01	414.47	490.59	497.38	21.73	23.888		
3,000.00	2,789.44	2,942.41	2,869.84	11.88	10.97	148.37	296.14	436.05	519.11	525.16	22.49	24.353		
3,100.00	2,876.40	3,038.23	2,961.79	12.35	11.35	148.64	312.27	457.63	547.65	552.95	23.25	24.786		
3,200.00	2,963.36	3,134.04	3,053.74	12.81	11.73	148.88	328.40	479.21	576.19	580.74	24.01	25.191		
3,300.00	3,050.32	3,229.85	3,145.68	13.28	12.12	149.10	344.53	500.79	604.75	608.54	24.77	25.570		
3,400.00	3,137.27	3,325.66	3,237.63	13.74	12.50	149.29	360.65	522.37	633.31	636.35	25.53	25.926		
3,500.00	3,224.23	3,421.48	3,329.58	14.21	12.89	149.47	376.78	543.95	661.88	664.16	26.29	26.261		
3,600.00	3,311.19	3,517.29	3,421.52	14.68	13.27	149.64	392.91	565.53	690.45	691.98	27.05	26.577		
3,700.00	3,398.15	3,613.10	3,513.47	15.15	13.65	149.79	409.04	587.11	719.03	719.80	27.82	26.874		
3,800.00	3,485.11	3,708.91	3,605.42	15.62	14.04	149.93	425.17	608.68	747.62	747.62	28.58	27.156		
3,900.00	3,572.06	3,804.73	3,697.36	16.09	14.42	150.06	441.29	630.26	776.20	775.44	29.35	27.422		
4,000.00	3,659.02	3,900.54	3,789.31	16.57	14.81	150.18	457.42	651.84	804.79	803.27	30.11	27.674		
4,100.00	3,745.98	3,996.35	3,881.26	17.04	15.19	150.29	473.55	673.42	833.39	831.10	30.88	27.914		
4,200.00	3,832.94	4,092.16	3,973.21	17.51	15.58	150.40	489.68	695.00	861.98					
4,300.00	3,919.90	4,187.98	4,065.15	17.99	15.97	150.49	505.81	716.58	890.58					
4,400.00	4,006.85	4,283.79	4,157.10	18.46	16.35	150.59	521.93	738.16	919.18					
4,500.00	4,093.81	4,379.60	4,249.05	18.93	16.74	150.67	538.06	759.74	947.78					
4,600.00	4,180.77	4,475.41	4,340.99	19.41	17.12	150.75	554.19	781.32	976.39					
4,700.00	4,267.73	4,571.23	4,432.94	19.88	17.51	150.83	570.32	802.90	1,005.00					
4,800.00	4,354.69	4,667.04	4,524.89	20.36	17.90	150.90	586.45	824.48	1,033.60					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 202H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Rule Assigned:													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,900.00	4,441.65	4,762.85	4,616.84	20.84	18.28	150.97	602.57	846.06	1,062.21	1,025.96	36.26	29.298	
5,000.00	4,528.60	4,858.66	4,708.78	21.31	18.67	151.04	618.70	867.64	1,090.82	1,053.80	37.02	29.462	
5,100.00	4,615.56	4,954.48	4,800.73	21.79	19.05	151.10	634.83	889.22	1,119.44	1,081.64	37.79	29.619	
5,200.00	4,702.52	5,050.29	4,892.68	22.26	19.44	151.16	650.96	910.80	1,148.05	1,109.48	38.56	29.770	
5,300.00	4,789.48	5,146.10	4,984.62	22.74	19.83	151.21	667.09	932.38	1,176.66	1,137.33	39.33	29.914	
5,400.00	4,876.44	5,241.92	5,076.57	23.22	20.21	151.27	683.21	953.96	1,205.28	1,165.17	40.10	30.053	
5,500.00	4,963.39	5,337.73	5,168.52	23.69	20.60	151.32	699.34	975.54	1,233.89	1,193.02	40.88	30.187	
5,600.00	5,050.35	5,433.54	5,260.47	24.17	20.99	151.37	715.47	997.12	1,262.51	1,220.86	41.65	30.315	
5,700.00	5,137.31	5,529.35	5,352.41	24.65	21.37	151.41	731.60	1,018.70	1,291.13	1,248.71	42.42	30.438	
5,800.00	5,224.27	5,625.17	5,444.36	25.13	21.76	151.46	747.73	1,040.27	1,319.75	1,276.56	43.19	30.557	
5,899.99	5,311.22	5,711.45	5,527.22	25.60	22.11	151.50	762.13	1,059.55	1,348.52	1,304.62	43.89	30.722	
5,908.16	5,318.32	5,717.55	5,533.09	25.64	22.13	151.51	763.12	1,060.87	1,350.91	1,306.97	43.95	30.741	
6,000.00	5,399.07	5,786.17	5,599.42	26.08	22.41	151.89	773.64	1,074.94	1,377.01	1,332.50	44.51	30.940	
6,100.00	5,488.91	5,861.00	5,672.21	26.53	22.70	152.27	784.02	1,088.84	1,403.30	1,358.20	45.10	31.116	
6,200.00	5,580.58	5,935.95	5,745.54	26.97	22.98	152.62	793.28	1,101.23	1,427.37	1,381.69	45.67	31.251	
6,300.00	5,673.90	6,000.00	5,808.52	27.39	23.22	152.93	800.28	1,110.60	1,449.24	1,403.10	46.14	31.409	
6,400.00	5,768.70	6,086.13	5,893.58	27.79	23.54	153.23	808.36	1,121.41	1,468.74	1,421.98	46.76	31.407	
6,500.00	5,864.80	6,161.33	5,968.15	28.18	23.80	153.48	814.16	1,129.17	1,486.01	1,438.74	47.28	31.432	
6,600.00	5,962.01	6,236.59	6,043.01	28.55	24.07	153.72	818.80	1,135.37	1,500.99	1,453.23	47.77	31.423	
6,700.00	6,060.15	6,300.00	6,106.22	28.89	24.29	153.92	821.78	1,139.36	1,513.73	1,465.60	48.13	31.452	
6,800.00	6,159.03	6,387.22	6,193.32	29.22	24.58	154.11	824.52	1,143.03	1,524.03	1,475.35	48.68	31.308	
6,900.00	6,258.47	6,462.55	6,268.63	29.53	24.82	154.27	825.61	1,144.48	1,532.06	1,482.96	49.10	31.205	
7,000.00	6,358.27	6,552.19	6,358.27	29.82	25.11	154.42	825.71	1,144.62	1,537.50	1,487.87	49.63	30.978	
7,091.75	6,450.00	6,643.92	6,450.00	30.07	25.40	-179.39	825.71	1,144.62	1,539.15	1,488.95	50.21	30.656	
7,100.00	6,458.25	6,652.17	6,458.25	30.10	25.43	-179.39	825.71	1,144.62	1,539.15	1,488.89	50.26	30.624	
7,199.35	6,557.60	6,751.55	6,557.63	30.36	25.75	-179.39	825.71	1,144.62	1,539.15	1,488.27	50.89	30.248	
7,199.99	6,558.23	6,752.20	6,558.27	30.36	25.75	-90.43	825.71	1,144.62	1,539.15	1,488.26	50.89	30.245	
7,225.00	6,583.23	6,777.83	6,583.89	30.43	25.83	-90.43	825.72	1,143.84	1,539.15	1,488.11	51.04	30.153	
7,250.00	6,608.15	6,803.44	6,609.41	30.49	25.90	-90.42	825.76	1,141.69	1,539.15	1,487.96	51.19	30.067	
7,275.00	6,632.93	6,829.05	6,634.77	30.55	25.97	-90.42	825.83	1,138.17	1,539.15	1,487.82	51.33	29.984	
7,300.00	6,657.50	6,854.64	6,659.90	30.61	26.04	-90.41	825.92	1,133.31	1,539.15	1,487.68	51.47	29.904	
7,325.00	6,681.80	6,880.23	6,684.72	30.67	26.11	-90.40	826.03	1,127.11	1,539.15	1,487.55	51.60	29.827	
7,350.00	6,705.76	6,905.81	6,709.16	30.72	26.17	-90.40	826.17	1,119.59	1,539.15	1,487.42	51.73	29.753	
7,375.00	6,729.31	6,931.37	6,733.15	30.78	26.24	-90.39	826.33	1,110.78	1,539.15	1,487.29	51.85	29.682	
7,400.00	6,752.39	6,956.91	6,756.62	30.83	26.30	-90.38	826.51	1,100.70	1,539.14	1,487.17	51.97	29.614	
7,425.00	6,774.94	6,982.44	6,779.51	30.87	26.35	-90.36	826.72	1,089.39	1,539.14	1,487.05	52.09	29.549	
7,450.00	6,796.89	7,007.96	6,801.74	30.92	26.41	-90.35	826.94	1,076.89	1,539.14	1,486.94	52.20	29.486	
7,475.00	6,818.19	7,033.45	6,823.25	30.96	26.46	-90.34	827.19	1,063.22	1,539.14	1,486.83	52.31	29.426	
7,500.00	6,838.77	7,058.92	6,843.99	30.99	26.51	-90.32	827.46	1,048.44	1,539.13	1,486.73	52.41	29.368	
7,525.00	6,858.58	7,084.36	6,863.89	31.03	26.55	-90.31	827.75	1,032.59	1,539.13	1,486.62	52.51	29.313	
7,550.00	6,877.57	7,109.79	6,882.91	31.05	26.59	-90.29	828.06	1,015.72	1,539.13	1,486.53	52.60	29.260	
7,575.00	6,895.68	7,135.19	6,900.98	31.08	26.63	-90.27	828.39	997.88	1,539.13	1,486.43	52.69	29.209	
7,600.00	6,912.86	7,160.56	6,918.06	31.10	26.67	-90.26	828.73	979.13	1,539.12	1,486.34	52.78	29.160	
7,625.00	6,929.07	7,185.91	6,934.10	31.12	26.71	-90.24	829.09	959.51	1,539.12	1,486.26	52.87	29.113	
7,650.00	6,944.26	7,211.23	6,949.06	31.14	26.74	-90.22	829.46	939.09	1,539.12	1,486.17	52.95	29.068	
7,675.00	6,958.39	7,236.52	6,962.91	31.15	26.77	-90.20	829.84	917.94	1,539.12	1,486.09	53.03	29.026	
7,700.00	6,971.42	7,261.78	6,975.60	31.16	26.80	-90.18	830.24	896.10	1,539.12	1,486.02	53.10	28.985	
7,725.00	6,983.32	7,287.01	6,987.10	31.16	26.83	-90.16	830.65	873.66	1,539.11	1,485.94	53.17	28.946	
7,750.00	6,994.05	7,312.21	6,997.40	31.16	26.85	-90.13	831.07	850.66	1,539.11	1,485.87	53.24	28.909	
7,775.00	7,003.58	7,337.38	7,006.45	31.16	26.87	-90.11	831.50	827.18	1,539.11	1,485.81	53.30	28.874	
7,800.00	7,011.89	7,362.51	7,014.25	31.16	26.89	-90.09	831.93	803.29	1,539.11	1,485.74	53.36	28.841	
7,825.00	7,018.96	7,387.62	7,020.76	31.15	26.91	-90.07	832.38	779.05	1,539.11	1,485.69	53.42	28.811	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design:		Camacho 25 26 (Middle) - Camacho 25-26 State Com 202H - OH - Plan #1											Offset Site Error:		0.00 usft
Survey Program:		0-SuperiorQC MWD+IFR1+SAG+FDIR							Rule Assigned:				Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
7,850.00	7,024.76	7,412.69	7,026.00	31.14	26.92	-90.05	832.82	754.54	1,539.11	1,485.63	53.47	28.782			
7,875.00	7,029.29	7,437.74	7,029.93	31.12	26.94	-90.02	833.27	729.81	1,539.11	1,485.58	53.52	28.756			
7,900.00	7,032.52	7,462.75	7,032.56	31.11	26.95	-90.00	833.73	704.95	1,539.11	1,485.54	53.57	28.733			
7,925.00	7,034.44	7,487.73	7,033.88	31.09	26.96	-89.98	834.18	680.01	1,539.11	1,485.50	53.61	28.712			
7,926.20	7,034.50	7,488.92	7,033.91	31.09	26.96	-89.98	834.20	678.81	1,539.11	1,485.50	53.61	28.711			
7,950.00	7,035.06	7,512.69	7,033.92	31.07	26.97	-89.96	834.64	655.06	1,539.11	1,485.46	53.64	28.692			
7,958.14	7,034.98	7,520.83	7,033.81	31.06	26.97	-89.96	834.79	646.92	1,539.11	1,485.45	53.66	28.684			
8,000.00	7,034.21	7,562.69	7,033.21	31.03	26.99	-89.96	835.55	605.07	1,539.11	1,485.37	53.74	28.639			
8,100.00	7,032.37	7,662.68	7,031.78	30.96	27.07	-89.98	837.37	505.10	1,539.10	1,485.10	54.01	28.499			
8,200.00	7,030.53	7,762.68	7,030.36	30.89	27.20	-89.99	839.19	405.13	1,539.10	1,484.74	54.36	28.312			
8,300.00	7,028.69	7,862.68	7,028.93	30.84	27.38	-90.01	841.02	305.15	1,539.10	1,484.29	54.81	28.081			
8,400.00	7,026.85	7,962.68	7,027.50	30.79	27.61	-90.02	842.84	205.18	1,539.10	1,483.76	55.35	27.809			
8,500.00	7,025.01	8,062.68	7,026.07	30.75	27.89	-90.04	844.66	105.21	1,539.10	1,483.13	55.97	27.500			
8,600.00	7,023.17	8,162.68	7,024.65	30.72	28.22	-90.06	846.49	5.24	1,539.10	1,482.43	56.67	27.158			
8,700.00	7,021.33	8,262.68	7,023.22	30.70	28.60	-90.07	848.31	-94.74	1,539.10	1,481.64	57.46	26.787			
8,800.00	7,019.49	8,362.68	7,021.79	30.71	29.02	-90.09	850.13	-194.71	1,539.10	1,480.78	58.32	26.391			
8,900.00	7,017.65	8,462.68	7,020.37	30.74	29.48	-90.10	851.96	-294.68	1,539.10	1,479.85	59.25	25.975			
9,000.00	7,015.81	8,562.68	7,018.94	30.85	29.98	-90.12	853.78	-394.65	1,539.10	1,478.84	60.26	25.541			
9,087.85	7,014.19	8,650.53	7,017.68	31.04	30.45	-90.13	855.38	-482.48	1,539.10	1,477.90	61.20	25.149			
9,100.00	7,013.97	8,662.68	7,017.51	31.07	30.52	-90.13	855.60	-494.62	1,539.10	1,477.77	61.33	25.095			
9,200.00	7,012.13	8,762.67	7,016.08	31.47	31.09	-90.15	857.42	-594.60	1,539.10	1,476.63	62.47	24.639			
9,300.00	7,010.29	8,862.67	7,014.66	31.98	31.69	-90.16	859.25	-694.57	1,539.10	1,475.44	63.66	24.177			
9,400.00	7,008.44	8,962.67	7,013.23	32.57	32.31	-90.18	861.07	-794.54	1,539.10	1,474.19	64.91	23.711			
9,500.00	7,006.60	9,062.67	7,011.80	33.21	32.97	-90.19	862.89	-894.51	1,539.10	1,472.89	66.22	23.244			
9,600.00	7,004.76	9,162.67	7,010.38	33.88	33.65	-90.21	864.72	-994.49	1,539.10	1,471.53	67.57	22.778			
9,700.00	7,002.92	9,262.67	7,008.95	34.58	34.36	-90.22	866.54	-1,094.46	1,539.10	1,470.13	68.97	22.315			
9,800.00	7,001.08	9,362.67	7,007.52	35.30	35.08	-90.24	868.36	-1,194.43	1,539.10	1,468.68	70.42	21.857			
9,900.00	6,999.24	9,462.67	7,006.09	36.05	35.83	-90.26	870.19	-1,294.40	1,539.10	1,467.20	71.91	21.405			
10,000.00	6,997.40	9,562.67	7,004.67	36.82	36.60	-90.27	872.01	-1,394.38	1,539.10	1,465.67	73.43	20.959			
10,100.00	6,995.56	9,662.67	7,003.24	37.60	37.39	-90.29	873.83	-1,494.35	1,539.11	1,464.11	75.00	20.522			
10,200.00	6,993.72	9,762.67	7,001.81	38.40	38.19	-90.30	875.65	-1,594.32	1,539.11	1,462.51	76.59	20.094			
10,300.00	6,991.88	9,862.67	7,000.39	39.22	39.01	-90.32	877.48	-1,694.29	1,539.11	1,460.88	78.23	19.675			
10,400.00	6,990.04	9,962.66	6,998.96	40.06	39.84	-90.33	879.30	-1,794.26	1,539.11	1,459.22	79.89	19.266			
10,500.00	6,988.20	10,062.66	6,997.53	40.90	40.69	-90.35	881.12	-1,894.24	1,539.11	1,457.53	81.58	18.867			
10,600.00	6,986.36	10,162.66	6,996.10	41.76	41.55	-90.36	882.95	-1,994.21	1,539.11	1,455.82	83.29	18.478			
10,700.00	6,984.52	10,262.66	6,994.68	42.64	42.43	-90.38	884.77	-2,094.18	1,539.11	1,454.08	85.04	18.100			
10,800.00	6,982.68	10,362.66	6,993.25	43.52	43.31	-90.39	886.59	-2,194.15	1,539.12	1,452.31	86.80	17.732			
10,900.00	6,980.84	10,462.66	6,991.82	44.41	44.21	-90.41	888.41	-2,294.13	1,539.12	1,450.53	88.59	17.374			
11,000.00	6,979.00	10,562.66	6,990.40	45.32	45.12	-90.42	890.24	-2,394.10	1,539.12	1,448.72	90.40	17.026			
11,100.00	6,977.16	10,662.66	6,988.97	46.23	46.04	-90.44	892.06	-2,494.07	1,539.12	1,446.90	92.23	16.689			
11,200.00	6,975.31	10,762.66	6,987.54	47.16	46.96	-90.46	893.88	-2,594.04	1,539.12	1,445.05	94.07	16.361			
11,300.00	6,973.47	10,862.66	6,986.11	48.09	47.90	-90.47	895.71	-2,694.02	1,539.13	1,443.19	95.94	16.043			
11,400.00	6,971.63	10,962.66	6,984.69	49.03	48.84	-90.49	897.53	-2,793.99	1,539.13	1,441.31	97.82	15.734			
11,500.00	6,969.79	11,062.66	6,983.26	49.98	49.79	-90.50	899.35	-2,893.96	1,539.13	1,439.42	99.72	15.435			
11,600.00	6,967.95	11,162.65	6,981.83	50.93	50.75	-90.52	901.18	-2,993.93	1,539.13	1,437.51	101.63	15.145			
11,700.00	6,966.11	11,262.65	6,980.41	51.89	51.71	-90.53	903.00	-3,093.91	1,539.14	1,435.58	103.55	14.863			
11,800.00	6,964.27	11,362.65	6,978.98	52.86	52.68	-90.55	904.82	-3,193.88	1,539.14	1,433.65	105.49	14.590			
11,900.00	6,962.43	11,462.65	6,977.55	53.83	53.66	-90.56	906.64	-3,293.85	1,539.14	1,431.70	107.44	14.325			
12,000.00	6,960.59	11,562.65	6,976.12	54.81	54.64	-90.58	908.47	-3,393.82	1,539.15	1,429.74	109.40	14.068			
12,100.00	6,958.75	11,662.65	6,974.70	55.80	55.63	-90.59	910.29	-3,493.79	1,539.15	1,427.77	111.38	13.819			
12,200.00	6,956.91	11,762.65	6,973.27	56.79	56.63	-90.61	912.11	-3,593.77	1,539.15	1,425.79	113.36	13.577			
12,300.00	6,955.07	11,862.65	6,971.84	57.78	57.62	-90.62	913.94	-3,693.74	1,539.16	1,423.80	115.36	13.343			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 202H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Rule Assigned:													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,400.00	6,953.23	11,962.65	6,970.42	58.78	58.63	-90.64	915.76	-3,793.71	1,539.16	1,421.80	117.36	13.115	
12,500.00	6,951.39	12,062.65	6,968.99	59.79	59.63	-90.66	917.58	-3,893.68	1,539.16	1,419.79	119.37	12.894	
12,600.00	6,949.55	12,162.65	6,967.56	60.79	60.65	-90.67	919.41	-3,993.66	1,539.17	1,417.77	121.39	12.679	
12,700.00	6,947.71	12,262.65	6,966.13	61.81	61.66	-90.69	921.23	-4,093.63	1,539.17	1,415.75	123.42	12.471	
12,800.00	6,945.87	12,362.64	6,964.71	62.82	62.68	-90.70	923.05	-4,193.60	1,539.18	1,413.72	125.46	12.268	
12,900.00	6,944.03	12,462.64	6,963.28	63.84	63.70	-90.72	924.87	-4,293.57	1,539.18	1,411.67	127.51	12.071	
13,000.00	6,942.19	12,562.64	6,961.85	64.87	64.73	-90.73	926.70	-4,393.55	1,539.18	1,409.63	129.56	11.880	
13,100.00	6,940.34	12,662.64	6,960.43	65.89	65.76	-90.75	928.52	-4,493.52	1,539.19	1,407.57	131.62	11.695	
13,200.00	6,938.50	12,762.64	6,959.00	66.92	66.79	-90.76	930.34	-4,593.49	1,539.19	1,405.51	133.68	11.514	
13,300.00	6,936.66	12,862.64	6,957.57	67.96	67.83	-90.78	932.17	-4,693.46	1,539.20	1,403.45	135.75	11.338	
13,400.00	6,934.82	12,962.64	6,956.14	68.99	68.87	-90.79	933.99	-4,793.44	1,539.20	1,401.38	137.83	11.168	
13,500.00	6,932.98	13,062.64	6,954.72	70.03	69.91	-90.81	935.81	-4,893.41	1,539.21	1,399.30	139.91	11.001	
13,600.00	6,931.14	13,162.64	6,953.29	71.07	70.96	-90.82	937.64	-4,993.38	1,539.21	1,397.22	142.00	10.840	
13,700.00	6,929.30	13,262.64	6,951.86	72.11	72.00	-90.84	939.46	-5,093.35	1,539.22	1,395.13	144.09	10.682	
13,800.00	6,927.46	13,362.64	6,950.44	73.16	73.05	-90.86	941.28	-5,193.32	1,539.22	1,393.04	146.19	10.529	
13,900.00	6,925.62	13,462.63	6,949.01	74.21	74.10	-90.87	943.10	-5,293.30	1,539.23	1,390.94	148.29	10.380	
14,000.00	6,923.78	13,562.63	6,947.58	75.26	75.16	-90.89	944.93	-5,393.27	1,539.23	1,388.84	150.39	10.235	
14,100.00	6,921.94	13,662.63	6,946.15	76.31	76.21	-90.90	946.75	-5,493.24	1,539.24	1,386.73	152.51	10.093	
14,200.00	6,920.10	13,762.63	6,944.73	77.37	77.27	-90.92	948.57	-5,593.21	1,539.24	1,384.62	154.62	9.955	
14,300.00	6,918.26	13,862.63	6,943.30	78.42	78.33	-90.93	950.40	-5,693.19	1,539.25	1,382.51	156.74	9.820	
14,400.00	6,916.42	13,962.63	6,941.87	79.48	79.39	-90.95	952.22	-5,793.16	1,539.26	1,380.39	158.86	9.689	
14,500.00	6,914.58	14,062.63	6,940.45	80.54	80.45	-90.96	954.04	-5,893.13	1,539.26	1,378.27	160.99	9.561	
14,600.00	6,912.74	14,162.63	6,939.02	81.61	81.52	-90.98	955.87	-5,993.10	1,539.27	1,376.15	163.12	9.437	
14,700.00	6,910.90	14,262.63	6,937.59	82.67	82.59	-90.99	957.69	-6,093.08	1,539.27	1,374.02	165.25	9.315	
14,800.00	6,909.06	14,362.63	6,936.16	83.74	83.65	-91.01	959.51	-6,193.05	1,539.28	1,371.89	167.39	9.196	
14,900.00	6,907.21	14,462.63	6,934.74	84.80	84.72	-91.02	961.33	-6,293.02	1,539.29	1,369.76	169.53	9.080	
15,000.00	6,905.37	14,562.63	6,933.31	85.87	85.79	-91.04	963.16	-6,392.99	1,539.29	1,367.63	171.67	8.967	
15,100.00	6,903.53	14,662.62	6,931.88	86.94	86.87	-91.06	964.98	-6,492.97	1,539.30	1,365.49	173.81	8.856	
15,200.00	6,901.69	14,762.62	6,930.46	88.01	87.94	-91.07	966.80	-6,592.94	1,539.31	1,363.35	175.96	8.748	
15,300.00	6,899.85	14,862.62	6,929.03	89.09	89.02	-91.09	968.63	-6,692.91	1,539.31	1,361.20	178.11	8.642	
15,400.00	6,898.01	14,962.62	6,927.60	90.16	90.09	-91.10	970.45	-6,792.88	1,539.32	1,359.06	180.26	8.539	
15,500.00	6,896.17	15,062.62	6,926.17	91.24	91.17	-91.12	972.27	-6,892.85	1,539.33	1,356.91	182.42	8.438	
15,600.00	6,894.33	15,162.62	6,924.75	92.31	92.25	-91.13	974.10	-6,992.83	1,539.33	1,354.76	184.58	8.340	
15,700.00	6,892.49	15,262.62	6,923.32	93.39	93.33	-91.15	975.92	-7,092.80	1,539.34	1,352.60	186.74	8.243	
15,800.00	6,890.65	15,362.62	6,921.89	94.47	94.41	-91.16	977.74	-7,192.77	1,539.35	1,350.45	188.90	8.149	
15,900.00	6,888.81	15,462.62	6,920.47	95.55	95.49	-91.18	979.56	-7,292.74	1,539.36	1,348.29	191.07	8.057	
16,000.00	6,886.97	15,562.62	6,919.04	96.63	96.58	-91.19	981.39	-7,392.72	1,539.36	1,346.13	193.23	7.966	
16,100.00	6,885.13	15,662.62	6,917.61	97.71	97.66	-91.21	983.21	-7,492.69	1,539.37	1,343.97	195.40	7.878	
16,200.00	6,883.29	15,762.62	6,916.18	98.80	98.75	-91.22	985.03	-7,592.66	1,539.38	1,341.81	197.57	7.792	
16,300.00	6,881.45	15,862.61	6,914.76	99.88	99.83	-91.24	986.86	-7,692.63	1,539.39	1,339.64	199.74	7.707	
16,400.00	6,879.61	15,962.61	6,913.33	100.97	100.92	-91.26	988.68	-7,792.61	1,539.40	1,337.48	201.92	7.624	
16,500.00	6,877.77	16,062.61	6,911.90	102.05	102.01	-91.27	990.50	-7,892.58	1,539.40	1,335.31	204.09	7.543	
16,600.00	6,875.93	16,162.61	6,910.48	103.14	103.10	-91.29	992.33	-7,992.55	1,539.41	1,333.14	206.27	7.463	
16,700.00	6,874.08	16,262.61	6,909.05	104.23	104.19	-91.30	994.15	-8,092.52	1,539.42	1,330.97	208.45	7.385	
16,800.00	6,872.24	16,362.61	6,907.62	105.31	105.28	-91.32	995.97	-8,192.49	1,539.43	1,328.80	210.63	7.309	
16,900.00	6,870.40	16,462.61	6,906.19	106.40	106.37	-91.33	997.79	-8,292.47	1,539.44	1,326.62	212.81	7.234	
17,000.00	6,868.56	16,562.61	6,904.77	107.49	107.46	-91.35	999.62	-8,392.44	1,539.45	1,324.45	215.00	7.160	
17,100.00	6,866.72	16,662.61	6,903.34	108.58	108.55	-91.36	1,001.44	-8,492.41	1,539.46	1,322.27	217.18	7.088	
17,200.00	6,864.88	16,762.61	6,901.91	109.68	109.65	-91.38	1,003.26	-8,592.38	1,539.46	1,320.09	219.37	7.018	
17,300.00	6,863.04	16,862.61	6,900.49	110.77	110.74	-91.39	1,005.09	-8,692.36	1,539.47	1,317.92	221.56	6.948	
17,400.00	6,861.20	16,962.61	6,899.06	111.86	111.84	-91.41	1,006.91	-8,792.33	1,539.48	1,315.74	223.75	6.880	
17,500.00	6,859.36	17,062.60	6,897.63	112.96	112.93	-91.42	1,008.73	-8,892.30	1,539.49	1,313.55	225.94	6.814	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 202H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
17,600.00	6,857.52	17,162.60	6,896.20	114.05	114.03	-91.44	1,010.56	-8,992.27	1,539.50	1,311.37	228.13	6.748		
17,700.00	6,855.68	17,262.60	6,894.78	115.14	115.12	-91.46	1,012.38	-9,092.25	1,539.51	1,309.19	230.32	6.684		
17,800.00	6,853.84	17,362.60	6,893.35	116.24	116.22	-91.47	1,014.20	-9,192.22	1,539.52	1,307.00	232.52	6.621		
17,900.00	6,852.00	17,462.60	6,891.92	117.34	117.32	-91.49	1,016.02	-9,292.19	1,539.53	1,304.82	234.71	6.559		
18,000.00	6,850.16	17,562.60	6,890.50	118.43	118.42	-91.50	1,017.85	-9,392.16	1,539.54	1,302.63	236.91	6.498		
18,100.00	6,848.32	17,662.60	6,889.07	119.53	119.52	-91.52	1,019.67	-9,492.14	1,539.55	1,300.44	239.11	6.439		
18,200.00	6,846.48	17,762.60	6,887.64	120.63	120.62	-91.53	1,021.49	-9,592.11	1,539.56	1,298.25	241.31	6.380		
18,300.00	6,844.64	17,862.60	6,886.21	121.73	121.71	-91.55	1,023.32	-9,692.08	1,539.57	1,296.07	243.51	6.323		
18,301.55	6,844.61	17,864.15	6,886.19	121.74	121.73	-91.55	1,023.34	-9,693.63	1,539.57	1,296.03	243.54	6.322		
18,334.53	6,844.00	17,877.63	6,886.00	122.10	121.88	-91.55	1,023.59	-9,707.11	1,539.70	1,295.76	243.94	6.312		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 203H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-179.52	-60.00	-0.50	60.00				
100.00	100.00	100.00	100.00	0.25	0.25	-179.52	-60.00	-0.50	60.00	59.50	0.50	119.559	
200.00	200.00	200.00	200.00	0.61	0.61	-179.52	-60.00	-0.50	60.00	58.78	1.22	49.230	
300.00	300.00	300.00	300.00	0.97	0.97	-179.52	-60.00	-0.50	60.00	58.07	1.94	30.997	
400.00	400.00	400.00	400.00	1.33	1.33	-179.52	-60.00	-0.50	60.00	57.35	2.65	22.619	
423.27	423.27	423.27	423.27	1.41	1.41	-179.52	-60.00	-0.50	60.00	57.18	2.82	21.281	
500.00	500.00	500.00	500.00	1.68	1.68	-179.52	-60.00	-0.50	60.00	56.63	3.37	17.807	
533.33	533.33	533.33	533.33	1.80	1.80	-179.52	-60.00	-0.50	60.00	56.39	3.61	16.627	
600.00	600.00	600.00	600.00	2.04	2.04	-179.52	-60.00	-0.50	60.00	55.92	4.09	14.683 CC, ES	
700.00	699.97	698.92	698.90	2.40	2.39	153.78	-60.84	0.99	62.80	58.02	4.79	13.118	
800.00	799.75	797.40	797.24	2.76	2.72	152.40	-63.33	5.43	71.22	65.74	5.48	12.990 SF	
900.00	899.14	894.99	894.47	3.12	3.06	150.69	-67.44	12.73	85.26	79.09	6.18	13.799	
1,000.00	997.97	991.27	990.06	3.48	3.39	149.01	-73.08	22.75	104.89	98.02	6.87	15.267	
1,100.00	1,096.04	1,085.85	1,083.52	3.84	3.73	147.54	-80.15	35.32	130.02	122.46	7.55	17.212	
1,200.00	1,193.17	1,178.36	1,174.44	4.20	4.06	146.27	-88.52	50.21	160.50	152.27	8.23	19.512	
1,300.00	1,289.17	1,268.47	1,262.42	4.56	4.39	145.18	-98.06	67.17	196.18	187.29	8.88	22.082	
1,400.00	1,383.85	1,356.19	1,347.44	4.94	4.72	144.21	-108.63	85.98	236.86	227.33	9.53	24.859	
1,500.00	1,477.05	1,445.68	1,433.89	5.32	5.06	143.59	-119.99	106.17	281.46	271.26	10.20	27.605	
1,600.00	1,568.57	1,533.51	1,518.72	5.71	5.40	143.38	-131.13	125.98	329.18	318.32	10.86	30.312	
1,700.00	1,658.25	1,619.49	1,601.77	6.11	5.73	143.39	-142.04	145.37	380.00	368.49	11.52	32.997	
1,783.60	1,731.68	1,689.85	1,669.73	6.45	6.01	143.49	-150.96	161.24	424.84	412.78	12.06	35.228	
1,800.00	1,745.94	1,703.51	1,682.92	6.52	6.06	143.67	-152.69	164.32	433.85	421.68	12.17	35.653	
1,900.00	1,832.90	1,786.79	1,763.37	6.94	6.39	144.62	-163.26	183.11	488.83	476.02	12.80	38.184	
2,000.00	1,919.86	1,870.07	1,843.81	7.37	6.72	145.39	-173.82	201.89	543.88	530.44	13.44	40.468	
2,100.00	2,006.82	1,953.35	1,924.26	7.80	7.05	146.01	-184.39	220.68	598.99	584.91	14.08	42.537	
2,200.00	2,093.78	2,036.63	2,004.70	8.24	7.38	146.53	-194.95	239.47	654.14	639.41	14.73	44.419	
2,300.00	2,180.73	2,119.92	2,085.15	8.69	7.71	146.97	-205.52	258.25	709.32	693.95	15.38	46.135	
2,400.00	2,267.69	2,203.20	2,165.59	9.14	8.04	147.35	-216.08	277.04	764.53	748.50	16.03	47.705	
2,500.00	2,354.65	2,286.48	2,246.04	9.59	8.37	147.67	-226.65	295.82	819.76	803.08	16.68	49.145	
2,600.00	2,441.61	2,369.76	2,326.48	10.04	8.71	147.96	-237.21	314.61	875.00	857.66	17.34	50.471	
2,700.00	2,528.57	2,453.04	2,406.93	10.50	9.04	148.21	-247.78	333.39	930.26	912.26	17.99	51.696	
2,800.00	2,615.53	2,536.33	2,487.37	10.96	9.38	148.43	-258.34	352.18	985.52	966.87	18.66	52.828	
2,900.00	2,702.48	2,619.61	2,567.82	11.42	9.72	148.63	-268.91	370.97	1,040.80	1,021.48	19.32	53.879	
3,000.00	2,789.44	2,702.89	2,648.26	11.88	10.05	148.81	-279.47	389.75	1,096.08	1,076.10	19.98	54.857	
3,100.00	2,876.40	2,786.17	2,728.71	12.35	10.39	148.97	-290.04	408.54	1,151.38	1,130.73	20.65	55.768	
3,200.00	2,963.36	2,869.45	2,809.15	12.81	10.73	149.12	-300.60	427.32	1,206.67	1,185.36	21.31	56.618	
3,300.00	3,050.32	2,952.74	2,889.60	13.28	11.06	149.25	-311.17	446.11	1,261.97	1,239.99	21.98	57.414	
3,400.00	3,137.27	3,036.02	2,970.04	13.74	11.40	149.37	-321.73	464.89	1,317.28	1,294.63	22.65	58.161	
3,500.00	3,224.23	3,119.30	3,050.49	14.21	11.74	149.49	-332.30	483.68	1,372.59	1,349.27	23.32	58.862	
3,600.00	3,311.19	3,202.58	3,130.93	14.68	12.08	149.59	-342.86	502.47	1,427.90	1,403.91	23.99	59.521	
3,700.00	3,398.15	3,285.86	3,211.38	15.15	12.42	149.69	-353.43	521.25	1,483.22	1,458.56	24.66	60.142	
3,800.00	3,485.11	3,369.15	3,291.82	15.62	12.76	149.78	-363.99	540.04	1,538.54	1,513.21	25.33	60.729	
3,900.00	3,572.06	3,452.43	3,372.27	16.09	13.10	149.86	-374.56	558.82	1,593.86	1,567.85	26.01	61.283	
4,000.00	3,659.02	3,535.71	3,452.71	16.57	13.43	149.94	-385.12	577.61	1,649.19	1,622.50	26.68	61.807	
4,100.00	3,745.98	3,618.99	3,533.16	17.04	13.77	150.01	-395.69	596.40	1,704.51	1,677.15	27.36	62.304	
4,200.00	3,832.94	3,702.27	3,613.60	17.51	14.11	150.08	-406.25	615.18	1,759.84	1,731.81	28.03	62.775	
4,300.00	3,919.90	3,785.56	3,694.05	17.99	14.45	150.14	-416.82	633.97	1,815.17	1,786.46	28.71	63.223	
4,400.00	4,006.85	3,868.84	3,774.49	18.46	14.79	150.20	-427.38	652.75	1,870.50	1,841.11	29.39	63.648	
4,500.00	4,093.81	3,952.12	3,854.94	18.93	15.13	150.26	-437.95	671.54	1,925.83	1,895.77	30.07	64.054	
4,600.00	4,180.77	4,035.40	3,935.38	19.41	15.47	150.31	-448.51	690.32	1,981.17	1,950.42	30.74	64.440	
4,700.00	4,267.73	4,118.68	4,015.83	19.88	15.81	150.36	-459.08	709.11	2,036.50	2,005.08	31.42	64.808	
4,800.00	4,354.69	4,201.97	4,096.27	20.36	16.15	150.41	-469.64	727.90	2,091.84	2,059.73	32.10	65.159	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 203H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,900.00	4,441.65	4,285.25	4,176.72	20.84	16.49	150.46	-480.21	746.68	2,147.17	2,114.39	32.78	65.495	
5,000.00	4,528.60	4,368.53	4,257.16	21.31	16.84	150.50	-490.77	765.47	2,202.51	2,169.05	33.46	65.816	
5,100.00	4,615.56	4,451.81	4,337.61	21.79	17.18	150.54	-501.34	784.25	2,257.85	2,223.70	34.15	66.124	
5,200.00	4,702.52	4,535.10	4,418.05	22.26	17.52	150.58	-511.90	803.04	2,313.19	2,278.36	34.83	66.418	
5,300.00	4,789.48	4,618.38	4,498.50	22.74	17.86	150.62	-522.47	821.82	2,368.53	2,333.02	35.51	66.700	
5,400.00	4,876.44	4,701.66	4,578.94	23.22	18.20	150.65	-533.03	840.61	2,423.87	2,387.68	36.19	66.971	
5,500.00	4,963.39	4,784.94	4,659.38	23.69	18.54	150.69	-543.60	859.40	2,479.21	2,442.33	36.88	67.230	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 (Middle) - Camacho 25-26 State Com 204H - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-179.49	-89.90	-0.80	89.90				
100.00	100.00	100.00	100.00	0.25	0.25	-179.49	-89.90	-0.80	89.90	89.40	0.50	179.140	
200.00	200.00	200.00	200.00	0.61	0.61	-179.49	-89.90	-0.80	89.90	88.68	1.22	73.764	
300.00	300.00	300.00	300.00	0.97	0.97	-179.49	-89.90	-0.80	89.90	87.97	1.94	46.444	
400.00	400.00	400.00	400.00	1.33	1.33	-179.49	-89.90	-0.80	89.90	87.25	2.65	33.891	
423.64	423.64	423.64	423.64	1.41	1.41	-179.49	-89.90	-0.80	89.90	87.08	2.82	31.856	
500.00	500.00	500.00	500.00	1.68	1.68	-179.49	-89.90	-0.80	89.90	86.53	3.37	26.681	
533.33	533.33	533.33	533.33	1.80	1.80	-179.49	-89.90	-0.80	89.90	86.29	3.61	24.914	
600.00	600.00	600.00	600.00	2.04	2.04	-179.49	-89.90	-0.80	89.90	85.82	4.09	22.000 CC, ES	
700.00	699.97	696.52	696.50	2.40	2.37	154.28	-91.70	0.15	93.72	88.95	4.78	19.623	
800.00	799.75	792.22	791.99	2.76	2.70	154.08	-97.02	2.97	105.14	99.68	5.46	19.272 SF	
900.00	899.14	886.27	885.53	3.12	3.02	153.79	-105.68	7.56	124.03	117.91	6.13	20.241	
1,000.00	997.97	977.95	976.24	3.48	3.33	153.46	-117.38	13.75	150.22	143.44	6.79	22.139	
1,100.00	1,096.04	1,066.58	1,063.36	3.84	3.64	153.10	-131.73	21.35	183.44	176.02	7.42	24.720	
1,200.00	1,193.17	1,151.61	1,146.30	4.20	3.95	152.71	-148.28	30.12	223.39	215.36	8.03	27.820	
1,300.00	1,289.17	1,232.57	1,224.57	4.56	4.25	152.27	-166.56	39.80	269.72	261.10	8.61	31.317	
1,400.00	1,383.85	1,309.11	1,297.85	4.94	4.54	151.78	-186.08	50.13	322.03	312.87	9.15	35.177	
1,500.00	1,477.05	1,380.99	1,365.96	5.32	4.82	151.22	-206.36	60.88	379.92	370.25	9.67	39.296	
1,600.00	1,568.57	1,448.05	1,428.83	5.71	5.08	150.57	-226.99	71.80	442.97	432.82	10.15	43.642	
1,700.00	1,658.25	1,510.24	1,486.49	6.11	5.34	149.81	-247.55	82.69	510.77	500.17	10.60	48.191	
1,783.60	1,731.68	1,558.48	1,530.78	6.45	5.54	149.09	-264.45	91.64	570.79	559.84	10.95	52.126	
1,800.00	1,745.94	1,567.57	1,539.09	6.52	5.58	149.16	-267.73	93.38	582.86	571.84	11.02	52.887	
1,900.00	1,832.90	1,621.63	1,588.13	6.94	5.80	149.50	-287.82	104.01	657.30	645.90	11.40	57.665	
2,000.00	1,919.86	1,679.84	1,640.41	7.37	6.06	149.72	-310.43	115.99	732.93	721.11	11.82	61.996	
2,100.00	2,006.82	1,745.01	1,698.87	7.80	6.35	149.92	-335.90	129.48	808.76	796.44	12.32	65.657	
2,200.00	2,093.78	1,810.19	1,757.33	8.24	6.64	150.09	-361.37	142.96	884.58	871.76	12.82	69.006	
2,300.00	2,180.73	1,875.37	1,815.79	8.69	6.94	150.22	-386.84	156.45	960.41	947.09	13.32	72.078	
2,400.00	2,267.69	1,940.54	1,874.24	9.14	7.24	150.34	-412.31	169.94	1,036.24	1,022.41	13.83	74.903	
2,500.00	2,354.65	2,005.72	1,932.70	9.59	7.54	150.44	-437.78	183.43	1,112.07	1,097.72	14.35	77.508	
2,600.00	2,441.61	2,070.90	1,991.16	10.04	7.85	150.53	-463.25	196.92	1,187.91	1,173.04	14.86	79.914	
2,700.00	2,528.57	2,136.07	2,049.62	10.50	8.15	150.61	-488.72	210.41	1,263.74	1,248.36	15.38	82.141	
2,800.00	2,615.53	2,201.25	2,108.07	10.96	8.46	150.68	-514.19	223.89	1,339.58	1,323.67	15.91	84.209	
2,900.00	2,702.48	2,266.43	2,166.53	11.42	8.77	150.74	-539.66	237.38	1,415.41	1,398.98	16.43	86.129	
3,000.00	2,789.44	2,331.60	2,224.99	11.88	9.09	150.80	-565.13	250.87	1,491.25	1,474.29	16.96	87.919	
3,100.00	2,876.40	2,396.78	2,283.45	12.35	9.40	150.85	-590.60	264.36	1,567.09	1,549.59	17.49	89.589	
3,200.00	2,963.36	2,461.96	2,341.90	12.81	9.71	150.89	-616.08	277.85	1,642.92	1,624.90	18.02	91.150	
3,300.00	3,050.32	2,527.13	2,400.36	13.28	10.03	150.93	-641.55	291.34	1,718.76	1,700.20	18.56	92.612	
3,400.00	3,137.27	2,592.31	2,458.82	13.74	10.35	150.97	-667.02	304.82	1,794.60	1,775.50	19.10	93.983	
3,500.00	3,224.23	2,657.48	2,517.28	14.21	10.67	151.01	-692.49	318.31	1,870.44	1,850.80	19.63	95.270	
3,600.00	3,311.19	2,722.66	2,575.74	14.68	10.99	151.04	-717.96	331.80	1,946.28	1,926.10	20.17	96.480	
3,700.00	3,398.15	2,787.84	2,634.19	15.15	11.30	151.07	-743.43	345.29	2,022.12	2,001.40	20.71	97.621	
3,800.00	3,485.11	2,853.01	2,692.65	15.62	11.63	151.10	-768.90	358.78	2,097.96	2,076.70	21.26	98.696	
3,900.00	3,572.06	2,918.19	2,751.11	16.09	11.95	151.12	-794.37	372.27	2,173.79	2,151.99	21.80	99.712	
4,000.00	3,659.02	2,983.37	2,809.57	16.57	12.27	151.15	-819.84	385.75	2,249.63	2,227.29	22.35	100.671	
4,100.00	3,745.98	3,048.54	2,868.02	17.04	12.59	151.17	-845.31	399.24	2,325.47	2,302.58	22.89	101.580	
4,200.00	3,832.94	3,113.72	2,926.48	17.51	12.91	151.19	-870.78	412.73	2,401.31	2,377.87	23.44	102.440	
4,300.00	3,919.90	3,178.90	2,984.94	17.99	13.24	151.21	-896.25	426.22	2,477.15	2,453.16	23.99	103.256	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - ANGELL RANCH 26 #001 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 314-INC-ONLY													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
11,800.00	6,964.27	6,974.23	6,951.81	52.86	150.41	-92.67	1,834.77	-5,502.65	2,415.09	2,230.71	184.37	13.099	
11,900.00	6,962.43	6,972.51	6,950.09	53.83	150.35	-92.52	1,834.80	-5,502.65	2,318.96	2,134.23	184.72	12.554	
12,000.00	6,960.59	6,970.79	6,948.37	54.81	150.30	-92.37	1,834.84	-5,502.65	2,223.17	2,038.04	185.12	12.009	
12,100.00	6,958.75	6,969.07	6,946.65	55.80	150.24	-92.21	1,834.87	-5,502.65	2,127.76	1,942.19	185.58	11.466	
12,200.00	6,956.91	6,967.36	6,944.94	56.79	150.18	-92.06	1,834.90	-5,502.65	2,032.80	1,846.71	186.09	10.924	
12,300.00	6,955.07	6,965.64	6,943.22	57.78	150.12	-91.91	1,834.94	-5,502.65	1,938.34	1,751.66	186.68	10.383	
12,400.00	6,953.23	6,963.92	6,941.50	58.78	150.07	-91.76	1,834.97	-5,502.65	1,844.47	1,657.11	187.36	9.845	
12,500.00	6,951.39	6,962.21	6,939.79	59.79	150.01	-91.61	1,835.00	-5,502.65	1,751.27	1,563.13	188.13	9.309	
12,600.00	6,949.55	6,960.49	6,938.08	60.79	149.95	-91.46	1,835.04	-5,502.65	1,658.86	1,469.83	189.02	8.776	
12,700.00	6,947.71	6,958.78	6,936.36	61.81	149.89	-91.31	1,835.07	-5,502.65	1,567.38	1,377.33	190.05	8.247	
12,800.00	6,945.87	6,957.06	6,934.65	62.82	149.83	-91.16	1,835.10	-5,502.65	1,477.00	1,285.76	191.24	7.723	
12,900.00	6,944.03	6,955.35	6,932.94	63.84	149.78	-91.01	1,835.13	-5,502.65	1,387.94	1,195.33	192.61	7.206	
13,000.00	6,942.19	6,953.64	6,931.23	64.87	149.72	-90.86	1,835.16	-5,502.65	1,300.47	1,106.27	194.20	6.696	
13,100.00	6,940.34	6,951.93	6,929.52	65.89	149.66	-90.71	1,835.19	-5,502.65	1,214.94	1,018.88	196.05	6.197	
13,200.00	6,938.50	6,950.22	6,927.81	66.92	149.61	-90.56	1,835.22	-5,502.65	1,131.77	933.58	198.19	5.710	
13,300.00	6,936.66	6,948.51	6,926.10	67.96	149.55	-90.41	1,835.25	-5,502.65	1,051.54	850.87	200.66	5.240	
13,400.00	6,934.82	6,946.80	6,924.40	68.99	149.49	-90.26	1,835.28	-5,502.65	974.96	771.47	203.49	4.791	
13,500.00	6,932.98	6,945.10	6,922.69	70.03	149.43	-90.11	1,835.30	-5,502.65	902.98	696.29	206.68	4.369	
13,600.00	6,931.14	6,943.39	6,920.99	71.07	149.38	-89.96	1,835.33	-5,502.65	836.76	626.55	210.21	3.981	
13,700.00	6,929.30	6,941.69	6,919.28	72.11	149.32	-89.81	1,835.36	-5,502.65	777.80	563.84	213.96	3.635	
13,800.00	6,927.46	6,939.98	6,917.58	73.16	149.26	-89.66	1,835.38	-5,502.65	727.85	510.13	217.73	3.343	
13,900.00	6,925.62	6,938.28	6,915.88	74.21	149.20	-89.51	1,835.41	-5,502.65	688.88	467.72	221.16	3.115	
14,000.00	6,923.78	6,936.58	6,914.17	75.26	149.15	-89.36	1,835.44	-5,502.65	662.83	439.02	223.81	2.962	
14,100.00	6,921.94	6,934.87	6,912.47	76.31	149.09	-89.21	1,835.46	-5,502.65	651.24	425.99	225.25	2.891	
14,126.14	6,921.46	6,934.43	6,912.03	76.59	149.08	-89.17	1,835.47	-5,502.65	650.72	425.33	225.39	2.887	CC, ES, SF
14,200.00	6,920.10	6,933.17	6,910.77	77.37	149.03	-89.06	1,835.49	-5,502.65	654.90	429.67	225.23	2.908	
14,300.00	6,918.26	6,931.47	6,909.08	78.42	148.98	-88.91	1,835.51	-5,502.65	673.54	449.75	223.78	3.010	
14,400.00	6,916.42	6,929.78	6,907.38	79.48	148.92	-88.76	1,835.53	-5,502.65	705.98	484.74	221.24	3.191	
14,500.00	6,914.58	6,928.08	6,905.68	80.54	148.86	-88.61	1,835.56	-5,502.65	750.44	532.41	218.03	3.442	
14,600.00	6,912.74	6,926.38	6,903.98	81.61	148.80	-88.46	1,835.58	-5,502.65	804.93	590.37	214.56	3.752	
14,700.00	6,910.90	6,924.68	6,902.29	82.67	148.75	-88.31	1,835.60	-5,502.65	867.55	656.43	211.12	4.109	
14,800.00	6,909.06	6,922.99	6,900.59	83.74	148.69	-88.16	1,835.62	-5,502.65	936.68	728.80	207.89	4.506	
14,900.00	6,907.21	6,921.29	6,898.90	84.80	148.63	-88.01	1,835.65	-5,502.65	1,010.99	806.05	204.94	4.933	
15,000.00	6,905.37	6,919.60	6,897.21	85.87	148.58	-87.87	1,835.67	-5,502.65	1,089.41	887.09	202.32	5.385	
15,100.00	6,903.53	6,917.91	6,895.52	86.94	148.52	-87.72	1,835.69	-5,502.65	1,171.13	971.12	200.00	5.855	
15,200.00	6,901.69	6,916.22	6,893.83	88.01	148.46	-87.57	1,835.71	-5,502.65	1,255.48	1,057.51	197.97	6.342	
15,300.00	6,899.85	6,914.53	6,892.14	89.09	148.41	-87.42	1,835.73	-5,502.65	1,341.99	1,145.80	196.19	6.840	
15,400.00	6,898.01	6,912.84	6,890.45	90.16	148.35	-87.27	1,835.75	-5,502.65	1,430.26	1,235.62	194.64	7.348	
15,500.00	6,896.17	6,911.15	6,888.76	91.24	148.29	-87.12	1,835.77	-5,502.65	1,519.98	1,326.70	193.27	7.864	
15,600.00	6,894.33	6,909.46	6,887.07	92.31	148.24	-86.97	1,835.78	-5,502.65	1,610.90	1,418.83	192.08	8.387	
15,700.00	6,892.49	6,907.77	6,885.38	93.39	148.18	-86.83	1,835.80	-5,502.65	1,702.85	1,511.82	191.02	8.914	
15,800.00	6,890.65	6,906.08	6,883.70	94.47	148.12	-86.68	1,835.82	-5,502.65	1,795.65	1,605.55	190.09	9.446	
15,900.00	6,888.81	6,904.40	6,882.01	95.55	148.07	-86.53	1,835.84	-5,502.65	1,889.18	1,699.91	189.27	9.981	
16,000.00	6,886.97	6,902.71	6,880.33	96.63	148.01	-86.38	1,835.85	-5,502.65	1,983.35	1,794.81	188.54	10.520	
16,100.00	6,885.13	6,901.03	6,878.65	97.71	147.95	-86.23	1,835.87	-5,502.65	2,078.06	1,890.17	187.89	11.060	
16,200.00	6,883.29	6,899.35	6,876.96	98.80	147.90	-86.09	1,835.88	-5,502.65	2,173.24	1,985.94	187.30	11.603	
16,300.00	6,881.45	6,897.67	6,875.28	99.88	147.84	-85.94	1,835.90	-5,502.65	2,268.83	2,082.05	186.78	12.147	
16,400.00	6,879.61	6,895.98	6,873.60	100.97	147.78	-85.79	1,835.91	-5,502.65	2,364.79	2,178.48	186.31	12.693	
16,500.00	6,877.77	6,894.30	6,871.92	102.05	147.73	-85.64	1,835.93	-5,502.65	2,461.07	2,275.18	185.89	13.240	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - EDDY GL STATE COM #001 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 500-UNKNOWN													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	36.50	0.00	0.00	172.75	-561.68	71.48	567.38				
100.00	100.00	63.50	100.00	0.25	3.18	172.75	-561.68	71.48	566.21	562.78	3.43	165.153	
200.00	200.00	163.50	200.00	0.61	8.18	172.75	-561.68	71.48	566.21	557.42	8.79	64.412	
300.00	300.00	263.50	300.00	0.97	13.18	172.75	-561.68	71.48	566.21	552.06	14.15	40.008	
400.00	400.00	363.50	400.00	1.33	18.19	172.75	-561.68	71.48	566.21	546.69	19.51	29.015	
500.00	500.00	463.50	500.00	1.68	23.19	172.75	-561.68	71.48	566.21	541.33	24.88	22.761	
600.00	600.00	563.50	600.00	2.04	27.59	172.75	-561.68	71.48	566.21	536.57	29.64	19.105	CC
700.00	699.97	663.47	699.97	2.40	31.65	146.69	-561.68	71.48	568.03	533.98	34.05	16.683	ES
800.00	799.75	763.25	799.75	2.76	35.69	146.98	-561.68	71.48	573.51	535.05	38.46	14.913	
900.00	899.14	862.64	899.14	3.12	39.73	147.43	-561.68	71.48	582.68	539.83	42.85	13.599	
1,000.00	997.97	961.47	997.97	3.48	43.73	148.05	-561.68	71.48	595.58	548.37	47.22	12.614	
1,100.00	1,096.04	1,059.54	1,096.04	3.84	47.69	148.79	-561.68	71.48	612.29	560.76	51.53	11.881	
1,200.00	1,193.17	1,156.67	1,193.17	4.20	51.60	149.63	-561.68	71.48	632.86	577.06	55.80	11.342	
1,300.00	1,289.17	1,252.67	1,289.17	4.56	55.46	150.54	-561.68	71.48	657.36	597.34	60.02	10.953	
1,400.00	1,383.85	1,347.35	1,383.85	4.94	59.27	151.50	-561.68	71.48	685.82	621.65	64.18	10.686	
1,500.00	1,477.05	1,440.55	1,477.05	5.32	63.01	152.46	-561.68	71.48	718.29	650.02	68.28	10.520	
1,600.00	1,568.57	1,532.07	1,568.57	5.71	66.69	153.42	-561.68	71.48	754.78	682.48	72.30	10.439	
1,700.00	1,658.25	1,621.75	1,658.25	6.11	70.29	154.34	-561.68	71.48	795.27	719.02	76.24	10.431	SF
1,783.60	1,731.68	1,695.18	1,731.68	6.45	73.23	155.08	-561.68	71.48	832.16	752.69	79.47	10.471	
1,800.00	1,745.94	1,709.44	1,745.94	6.52	73.81	155.31	-561.68	71.48	839.68	759.58	80.10	10.483	
1,900.00	1,832.90	1,796.40	1,832.90	6.94	77.29	156.62	-561.68	71.48	885.72	801.81	83.91	10.556	
2,000.00	1,919.86	1,883.36	1,919.86	7.37	80.78	157.80	-561.68	71.48	932.10	844.38	87.72	10.626	
2,100.00	2,006.82	1,970.32	2,006.82	7.80	84.27	158.87	-561.68	71.48	978.77	887.24	91.53	10.694	
2,200.00	2,093.78	2,057.28	2,093.78	8.24	87.76	159.85	-561.68	71.48	1,025.70	930.36	95.34	10.758	
2,300.00	2,180.73	2,144.23	2,180.73	8.69	91.24	160.75	-561.68	71.48	1,072.85	973.70	99.15	10.821	
2,400.00	2,267.69	2,231.19	2,267.69	9.14	94.73	161.57	-561.68	71.48	1,120.19	1,017.23	102.96	10.880	
2,500.00	2,354.65	2,318.15	2,354.65	9.59	98.21	162.33	-561.68	71.48	1,167.70	1,060.93	106.77	10.936	
2,600.00	2,441.61	2,405.11	2,441.61	10.04	101.69	163.03	-561.68	71.48	1,215.36	1,104.77	110.59	10.990	
2,700.00	2,528.57	2,492.07	2,528.57	10.50	105.18	163.68	-561.68	71.48	1,263.15	1,148.75	114.40	11.042	
2,800.00	2,615.53	2,579.03	2,615.53	10.96	108.66	164.28	-561.68	71.48	1,311.06	1,192.85	118.21	11.091	
2,900.00	2,702.48	2,665.98	2,702.48	11.42	112.14	164.84	-561.68	71.48	1,359.07	1,237.05	122.03	11.138	
3,000.00	2,789.44	2,752.94	2,789.44	11.88	115.63	165.36	-561.68	71.48	1,407.18	1,281.34	125.84	11.182	
3,100.00	2,876.40	2,839.90	2,876.40	12.35	119.11	165.85	-561.68	71.48	1,455.37	1,325.72	129.65	11.225	
3,200.00	2,963.36	2,926.86	2,963.36	12.81	122.59	166.30	-561.68	71.48	1,503.64	1,370.17	133.47	11.266	
3,300.00	3,050.32	3,013.82	3,050.32	13.28	126.07	166.73	-561.68	71.48	1,551.98	1,414.70	137.28	11.305	
3,400.00	3,137.27	3,100.77	3,137.27	13.74	129.56	167.14	-561.68	71.48	1,600.39	1,459.29	141.10	11.342	
3,500.00	3,224.23	3,187.73	3,224.23	14.21	133.04	167.52	-561.68	71.48	1,648.85	1,503.93	144.92	11.378	
3,600.00	3,311.19	3,274.69	3,311.19	14.68	136.52	167.87	-561.68	71.48	1,697.36	1,548.63	148.73	11.412	
3,700.00	3,398.15	3,361.65	3,398.15	15.15	140.00	168.21	-561.68	71.48	1,745.92	1,593.38	152.55	11.445	
3,800.00	3,485.11	3,448.61	3,485.11	15.62	143.48	168.53	-561.68	71.48	1,794.53	1,638.17	156.37	11.476	
3,900.00	3,572.06	3,535.56	3,572.06	16.09	146.96	168.84	-561.68	71.48	1,843.18	1,683.00	160.18	11.507	
4,000.00	3,659.02	3,622.52	3,659.02	16.57	150.44	169.13	-561.68	71.48	1,891.87	1,727.86	164.00	11.536	
4,100.00	3,745.98	3,709.48	3,745.98	17.04	153.92	169.40	-561.68	71.48	1,940.59	1,772.77	167.82	11.564	
4,200.00	3,832.94	3,796.44	3,832.94	17.51	157.40	169.66	-561.68	71.48	1,989.34	1,817.70	171.64	11.590	
4,300.00	3,919.90	3,883.40	3,919.90	17.99	160.88	169.91	-561.68	71.48	2,038.13	1,862.67	175.46	11.616	
4,400.00	4,006.85	3,970.35	4,006.85	18.46	164.36	170.14	-561.68	71.48	2,086.94	1,907.66	179.28	11.641	
4,500.00	4,093.81	4,057.31	4,093.81	18.93	167.84	170.37	-561.68	71.48	2,135.77	1,952.68	183.10	11.665	
4,600.00	4,180.77	4,144.27	4,180.77	19.41	171.33	170.59	-561.68	71.48	2,184.64	1,997.72	186.92	11.688	
4,700.00	4,267.73	4,231.23	4,267.73	19.88	174.81	170.79	-561.68	71.48	2,233.52	2,042.79	190.74	11.710	
4,800.00	4,354.69	4,318.19	4,354.69	20.36	178.29	170.99	-561.68	71.48	2,282.43	2,087.87	194.56	11.731	
4,900.00	4,441.65	4,405.15	4,441.65	20.84	181.77	171.18	-561.68	71.48	2,331.35	2,132.98	198.38	11.752	
5,000.00	4,528.60	4,492.10	4,528.60	21.31	185.25	171.36	-561.68	71.48	2,380.30	2,178.10	202.20	11.772	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - EDDY GL STATE COM #001 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 500-UNKNOWN												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	4,615.56	4,579.06	4,615.56	21.79	188.73	171.54	-561.68	71.48	2,429.26	2,223.24	206.02	11.791	
5,200.00	4,702.52	4,666.02	4,702.52	22.26	192.21	171.70	-561.68	71.48	2,478.24	2,268.40	209.84	11.810	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - GUARDIAN 25 STATE COM #001 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 203-INC-ONLY													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,300.00	7,010.29	6,994.85	7,008.35	31.98	167.49	-91.15	827.74	-2,544.75	2,448.27	2,250.09	198.18	12.354	
9,400.00	7,008.44	6,993.19	7,006.68	32.57	167.45	-91.09	827.74	-2,544.75	2,373.65	2,175.05	198.60	11.952	
9,500.00	7,006.60	6,991.52	7,005.02	33.21	167.41	-91.03	827.74	-2,544.75	2,300.95	2,101.88	199.07	11.558	
9,600.00	7,004.76	6,989.86	7,003.36	33.88	167.37	-90.97	827.74	-2,544.75	2,230.37	2,030.76	199.61	11.174	
9,700.00	7,002.92	6,988.20	7,001.70	34.58	167.33	-90.91	827.74	-2,544.75	2,162.10	1,961.90	200.20	10.800	
9,800.00	7,001.08	6,986.54	7,000.04	35.30	167.29	-90.85	827.74	-2,544.75	2,096.39	1,895.53	200.86	10.437	
9,900.00	6,999.24	6,984.88	6,998.37	36.05	167.25	-90.79	827.75	-2,544.75	2,033.47	1,831.88	201.58	10.087	
10,000.00	6,997.40	6,983.21	6,996.71	36.82	167.21	-90.73	827.75	-2,544.75	1,973.61	1,771.24	202.37	9.752	
10,100.00	6,995.56	6,981.55	6,995.05	37.60	167.17	-90.67	827.75	-2,544.75	1,917.10	1,713.87	203.22	9.433	
10,200.00	6,993.72	6,979.89	6,993.39	38.40	167.12	-90.61	827.75	-2,544.75	1,864.24	1,660.11	204.13	9.132	
10,300.00	6,991.88	6,978.23	6,991.73	39.22	167.08	-90.55	827.75	-2,544.75	1,815.36	1,610.26	205.10	8.851	
10,400.00	6,990.04	6,976.53	6,990.04	40.06	167.04	-90.49	827.05	-2,544.75	1,771.39	1,565.30	206.10	8.595	
10,500.00	6,988.20	6,974.69	6,988.20	40.90	167.00	-90.43	827.05	-2,544.75	1,731.46	1,524.33	207.13	8.359	
10,600.00	6,986.36	6,972.85	6,986.36	41.76	166.95	-90.36	827.05	-2,544.75	1,696.48	1,488.32	208.17	8.150	
10,700.00	6,984.52	6,971.01	6,984.52	42.64	166.90	-90.30	827.05	-2,544.75	1,666.78	1,457.57	209.21	7.967	
10,800.00	6,982.68	6,969.17	6,982.68	43.52	166.86	-90.23	827.05	-2,544.75	1,642.63	1,432.42	210.22	7.814	
10,900.00	6,980.84	6,967.33	6,980.84	44.41	166.81	-90.16	827.05	-2,544.75	1,624.29	1,413.11	211.19	7.691	
11,000.00	6,979.00	6,965.49	6,979.00	45.32	166.77	-90.10	827.05	-2,544.75	1,611.96	1,399.87	212.09	7.600	
11,100.00	6,977.16	6,963.65	6,977.16	46.23	166.72	-90.03	827.05	-2,544.75	1,605.76	1,392.86	212.90	7.542	
11,149.68	6,976.24	6,962.74	6,976.24	46.69	166.70	-90.00	827.05	-2,544.75	1,605.00	1,391.72	213.27	7.526 CC, ES	
11,200.00	6,975.31	6,961.81	6,975.31	47.16	166.68	-89.97	827.05	-2,544.75	1,605.78	1,392.16	213.62	7.517 SF	
11,300.00	6,973.47	6,959.97	6,973.47	48.09	166.63	-89.90	827.05	-2,544.75	1,612.02	1,397.80	214.22	7.525	
11,400.00	6,971.63	6,958.13	6,971.63	49.03	166.59	-89.84	827.05	-2,544.75	1,624.39	1,409.69	214.70	7.566	
11,500.00	6,969.79	6,956.29	6,969.79	49.98	166.54	-89.77	827.05	-2,544.75	1,642.77	1,427.71	215.06	7.639	
11,600.00	6,967.95	6,954.45	6,967.95	50.93	166.50	-89.70	827.05	-2,544.75	1,666.95	1,451.65	215.30	7.742	
11,700.00	6,966.11	6,952.61	6,966.11	51.89	166.45	-89.64	827.05	-2,544.75	1,696.69	1,481.27	215.43	7.876	
11,800.00	6,964.27	6,950.77	6,964.27	52.86	166.41	-89.57	827.05	-2,544.75	1,731.70	1,516.25	215.45	8.038	
11,900.00	6,962.43	6,948.93	6,962.43	53.83	166.36	-89.51	827.05	-2,544.75	1,771.67	1,556.29	215.37	8.226	
12,000.00	6,960.59	6,947.08	6,960.59	54.81	166.31	-89.44	827.05	-2,544.75	1,816.26	1,601.04	215.22	8.439	
12,100.00	6,958.75	6,945.24	6,958.75	55.80	166.27	-89.38	827.05	-2,544.75	1,865.16	1,650.16	215.00	8.675	
12,200.00	6,956.91	6,943.40	6,956.91	56.79	166.22	-89.31	827.05	-2,544.75	1,918.02	1,703.30	214.72	8.933	
12,300.00	6,955.07	6,941.56	6,955.07	57.78	166.18	-89.24	827.05	-2,544.75	1,974.54	1,760.14	214.40	9.210	
12,400.00	6,953.23	6,939.72	6,953.23	58.78	166.13	-89.18	827.05	-2,544.75	2,034.40	1,820.36	214.05	9.505	
12,500.00	6,951.39	6,937.88	6,951.39	59.79	166.09	-89.11	827.05	-2,544.75	2,097.32	1,883.66	213.67	9.816	
12,600.00	6,949.55	6,936.04	6,949.55	60.79	166.04	-89.05	827.05	-2,544.75	2,163.04	1,949.76	213.27	10.142	
12,700.00	6,947.71	6,934.20	6,947.71	61.81	166.00	-88.98	827.05	-2,544.75	2,231.30	2,018.43	212.87	10.482	
12,800.00	6,945.87	6,932.36	6,945.87	62.82	165.95	-88.92	827.05	-2,544.75	2,301.88	2,089.42	212.46	10.834	
12,900.00	6,944.03	6,930.52	6,944.03	63.84	165.91	-88.85	827.05	-2,544.75	2,374.57	2,162.52	212.05	11.198	
13,000.00	6,942.19	6,928.68	6,942.19	64.87	165.86	-88.78	827.05	-2,544.75	2,449.19	2,237.54	211.65	11.572	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 271H - OH - OH													Offset Site Error:	0.00 usft	
Survey Program:		26-SuperiorQC MWD+IFR1+SAG+FDIR					Rule Assigned:							Offset Well Error:	0.00 usft
Measured Depth (usft)	Reference Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.30	0.00	0.00	0.00	9.14	2,013.10	323.80	2,038.97						
100.00	100.00	104.62	104.32	0.25	0.28	9.14	2,012.58	323.79	2,038.46	2,037.93	0.53	3,855.245			
111.72	111.72	112.02	111.72	0.29	0.30	9.14	2,012.57	323.82	2,038.45	2,037.85	0.60	3,417.938			
200.00	200.00	164.30	163.99	0.61	0.48	9.15	2,012.88	324.33	2,039.16	2,038.06	1.10	1,859.446			
300.00	300.00	251.98	251.66	0.97	0.79	9.17	2,014.48	325.08	2,041.11	2,039.35	1.76	1,158.933			
400.00	400.00	362.36	362.00	1.33	1.18	9.15	2,017.23	325.08	2,043.61	2,041.10	2.51	815.376			
500.00	500.00	450.39	450.01	1.68	1.49	9.17	2,018.77	325.95	2,045.52	2,042.35	3.18	643.761			
600.00	600.00	541.66	541.25	2.04	1.82	9.20	2,021.03	327.47	2,048.23	2,044.37	3.86	530.418			
700.00	699.97	636.30	635.83	2.40	2.16	-16.92	2,023.65	329.16	2,049.17	2,044.61	4.56	449.752			
800.00	799.75	744.64	744.11	2.76	2.54	-16.96	2,026.55	331.25	2,045.86	2,040.55	5.30	385.772			
900.00	899.14	855.72	855.14	3.12	2.94	-17.07	2,028.96	333.41	2,037.89	2,031.83	6.06	336.173			
1,000.00	997.97	967.49	966.88	3.48	3.34	-17.27	2,030.79	335.07	2,025.17	2,018.35	6.82	296.779			
1,100.00	1,096.04	1,069.02	1,068.39	3.84	3.70	-17.52	2,031.97	336.95	2,007.94	2,000.40	7.55	266.096			
1,200.00	1,193.17	1,168.38	1,167.69	4.20	4.06	-17.80	2,032.76	340.40	1,986.53	1,978.27	8.26	240.562			
1,300.00	1,289.17	1,265.83	1,264.99	4.56	4.40	-18.11	2,033.18	345.62	1,961.03	1,952.07	8.96	218.866			
1,400.00	1,383.85	1,360.02	1,358.94	4.94	4.74	-18.43	2,033.32	352.37	1,931.53	1,921.88	9.65	200.198			
1,500.00	1,477.05	1,449.42	1,448.10	5.32	5.06	-18.84	2,033.59	358.96	1,898.29	1,887.97	10.32	183.992			
1,600.00	1,568.57	1,539.02	1,537.46	5.71	5.38	-19.35	2,034.11	365.37	1,861.42	1,850.43	10.98	169.468			
1,700.00	1,658.25	1,631.57	1,629.80	6.11	5.71	-19.98	2,034.69	371.77	1,820.79	1,809.13	11.66	156.190			
1,783.60	1,731.68	1,707.41	1,705.46	6.45	5.98	-20.61	2,035.13	376.84	1,783.94	1,771.73	12.21	146.070			
1,800.00	1,745.94	1,721.86	1,719.88	6.52	6.03	-20.66	2,035.21	377.79	1,776.46	1,764.14	12.32	144.152			
1,900.00	1,832.90	1,809.97	1,807.83	6.94	6.35	-21.04	2,035.78	383.17	1,730.90	1,717.94	12.97	133.502			
2,000.00	1,919.86	1,897.97	1,895.69	7.37	6.67	-21.46	2,036.45	387.94	1,685.42	1,671.81	13.61	123.821			
2,100.00	2,006.82	1,986.02	1,983.64	7.80	6.98	-21.93	2,037.20	392.13	1,640.04	1,625.78	14.26	114.985			
2,200.00	2,093.78	2,073.92	2,071.46	8.24	7.30	-22.44	2,038.03	395.78	1,594.77	1,579.85	14.92	106.897			
2,300.00	2,180.73	2,164.17	2,161.65	8.69	7.62	-23.01	2,038.87	399.13	1,549.57	1,533.99	15.59	99.427			
2,400.00	2,267.69	2,254.50	2,251.91	9.14	7.94	-23.63	2,039.60	402.32	1,504.37	1,488.11	16.26	92.546			
2,500.00	2,354.65	2,343.65	2,341.01	9.59	8.26	-24.29	2,040.25	405.04	1,459.20	1,442.27	16.93	86.208			
2,600.00	2,441.61	2,432.15	2,429.49	10.04	8.58	-25.03	2,040.91	406.76	1,414.15	1,396.55	17.60	80.345			
2,700.00	2,528.57	2,524.40	2,521.74	10.50	8.91	-25.89	2,041.51	407.83	1,369.19	1,350.90	18.29	74.870			
2,800.00	2,615.53	2,618.51	2,615.84	10.96	9.25	-26.80	2,041.67	409.30	1,324.06	1,305.07	18.98	69.758			
2,900.00	2,702.48	2,703.45	2,700.77	11.42	9.54	-27.68	2,041.56	410.63	1,278.93	1,259.27	19.66	65.068			
3,000.00	2,789.44	2,783.40	2,780.72	11.88	9.82	-28.64	2,041.89	410.54	1,234.54	1,214.22	20.33	60.733			
3,100.00	2,876.40	2,866.42	2,863.72	12.35	10.10	-29.76	2,042.71	409.02	1,191.03	1,170.02	21.01	56.681			
3,200.00	2,963.36	2,958.22	2,955.50	12.81	10.41	-31.09	2,043.49	407.48	1,147.87	1,126.16	21.71	52.864			
3,300.00	3,050.32	3,048.69	3,045.97	13.28	10.71	-32.46	2,043.91	406.70	1,104.86	1,082.44	22.42	49.279			
3,400.00	3,137.27	3,134.15	3,131.42	13.74	11.00	-33.85	2,044.27	405.96	1,062.36	1,039.23	23.14	45.920			
3,500.00	3,224.23	3,220.29	3,217.56	14.21	11.29	-35.37	2,044.73	404.90	1,020.62	996.75	23.86	42.769			
3,600.00	3,311.19	3,313.83	3,311.09	14.68	11.61	-37.16	2,044.94	403.67	979.33	954.73	24.61	39.798			
3,700.00	3,398.15	3,398.70	3,395.95	15.15	11.89	-38.92	2,044.80	402.60	938.54	913.17	25.36	37.003			
3,800.00	3,485.11	3,481.82	3,479.06	15.62	12.17	-40.78	2,044.99	401.39	899.02	872.88	26.14	34.395			
3,900.00	3,572.06	3,566.90	3,564.13	16.09	12.46	-42.83	2,045.39	400.00	860.82	833.88	26.94	31.958			
4,000.00	3,659.02	3,652.45	3,649.66	16.57	12.75	-45.07	2,045.92	398.51	823.98	796.23	27.76	29.687			
4,100.00	3,745.98	3,739.65	3,736.84	17.04	13.05	-47.52	2,046.54	397.03	788.61	760.01	28.60	27.574			
4,200.00	3,832.94	3,827.28	3,824.47	17.51	13.35	-50.18	2,047.10	395.60	754.75	725.28	29.47	25.614			
4,300.00	3,919.90	3,912.47	3,909.64	17.99	13.65	-52.97	2,047.64	394.09	722.74	692.38	30.36	23.808			
4,400.00	4,006.85	3,997.48	3,994.63	18.46	13.94	-55.96	2,048.38	392.46	693.05	661.78	31.27	22.162			
4,500.00	4,093.81	4,091.23	4,088.37	18.93	14.27	-59.45	2,049.32	391.15	665.61	633.40	32.21	20.666			
4,600.00	4,180.77	4,183.44	4,180.57	19.41	14.59	-63.00	2,049.97	391.80	639.50	606.35	33.16	19.287			
4,700.00	4,267.73	4,270.78	4,267.90	19.88	14.90	-66.56	2,050.69	392.83	615.97	581.86	34.12	18.055			
4,800.00	4,354.69	4,357.48	4,354.59	20.36	15.21	-70.29	2,051.57	393.94	595.50	560.42	35.08	16.977			
4,900.00	4,441.65	4,444.32	4,441.42	20.84	15.52	-74.21	2,052.61	394.96	578.49	542.47	36.03	16.057			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 271H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 26-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Rule Assigned:												Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	4,528.60	4,531.56	4,528.64	21.31	15.83	-78.30	2,053.75	396.01	565.09	528.14	36.95	15.292	
5,100.00	4,615.56	4,617.51	4,614.58	21.79	16.14	-82.44	2,055.18	396.97	555.76	517.91	37.84	14.686	
5,200.00	4,702.52	4,705.26	4,702.29	22.26	16.45	-86.72	2,057.08	398.04	550.54	511.86	38.68	14.232	
5,281.59	4,773.47	4,777.69	4,774.69	22.65	16.71	-90.26	2,058.89	399.07	549.24	509.91	39.33	13.965	
5,300.00	4,789.48	4,794.25	4,791.25	22.74	16.77	-91.07	2,059.32	399.32	549.31	509.83	39.47	13.917	
5,400.00	4,876.44	4,887.51	4,884.49	23.22	17.10	-95.71	2,060.47	400.75	551.59	511.37	40.21	13.717	
5,500.00	4,963.39	4,972.82	4,969.79	23.69	17.40	-100.02	2,060.26	401.85	557.85	517.00	40.85	13.657	
5,600.00	5,050.35	5,058.51	5,055.48	24.17	17.70	-104.26	2,060.00	402.68	568.55	527.14	41.42	13.727	
5,700.00	5,137.31	5,145.75	5,142.72	24.65	18.00	-108.40	2,060.16	403.48	583.32	541.38	41.94	13.908	
5,800.00	5,224.27	5,227.43	5,224.39	25.13	18.29	-112.09	2,060.53	404.02	601.95	559.57	42.38	14.204	
5,899.99	5,311.22	5,308.61	5,305.57	25.60	18.57	-115.62	2,060.36	403.58	624.91	582.15	42.76	14.614	
5,908.16	5,318.32	5,315.43	5,312.38	25.64	18.59	-115.91	2,060.34	403.52	626.95	584.16	42.79	14.651	
6,000.00	5,399.07	5,393.59	5,390.54	26.08	18.86	-119.52	2,060.13	402.62	650.52	607.36	43.15	15.075	
6,100.00	5,488.91	5,479.72	5,476.66	26.53	19.15	-122.99	2,059.96	401.31	676.71	633.15	43.55	15.538	
6,200.00	5,580.58	5,572.81	5,569.74	26.97	19.47	-126.16	2,059.72	399.60	702.59	658.57	44.02	15.960	
6,300.00	5,673.90	5,676.21	5,673.09	27.39	19.82	-129.28	2,056.90	399.47	726.29	681.70	44.59	16.289	
6,400.00	5,768.70	5,781.51	5,778.34	27.79	20.18	-131.94	2,054.05	400.88	747.08	701.91	45.18	16.537	
6,500.00	5,864.80	5,884.56	5,881.35	28.18	20.54	-134.04	2,052.49	403.44	764.42	718.65	45.77	16.702	
6,600.00	5,962.01	5,985.89	5,982.64	28.55	20.90	-135.67	2,051.89	406.17	778.82	732.46	46.36	16.799	
6,700.00	6,060.15	6,087.13	6,083.83	28.89	21.25	-136.91	2,052.15	409.19	789.91	742.93	46.97	16.817	
6,800.00	6,159.03	6,174.39	6,171.06	29.22	21.56	-137.71	2,052.76	411.30	798.40	750.94	47.46	16.821	
6,900.00	6,258.47	6,265.37	6,262.04	29.53	21.89	-138.26	2,053.28	411.80	805.50	757.50	48.00	16.782	
7,000.00	6,358.27	7,499.08	7,055.65	29.82	25.90	162.64	2,024.69	1,116.32	776.41	740.48	35.94	21.606	
7,091.75	6,450.00	7,504.92	7,055.90	30.07	25.92	-173.46	2,024.45	1,122.15	696.03	658.26	37.76	18.432	
7,100.00	6,458.25	7,505.34	7,055.91	30.10	25.92	-173.53	2,024.43	1,122.57	688.86	650.92	37.94	18.156	
7,199.35	6,557.60	7,510.18	7,056.11	30.36	25.94	-174.34	2,024.23	1,127.40	604.66	564.32	40.34	14.988	
7,199.99	6,558.23	7,510.21	7,056.11	30.36	25.94	-85.50	2,024.23	1,127.43	604.14	563.78	40.36	14.969	
7,225.00	6,583.23	7,510.55	7,056.12	30.43	25.94	-89.83	2,024.21	1,127.77	583.68	542.63	41.05	14.220	
7,250.00	6,608.15	7,509.35	7,056.07	30.49	25.93	-93.67	2,024.26	1,126.58	563.59	521.82	41.77	13.494	
7,275.00	6,632.93	7,506.66	7,055.97	30.55	25.92	-97.02	2,024.38	1,123.89	543.95	501.44	42.51	12.796	
7,300.00	6,657.50	7,502.52	7,055.80	30.61	25.91	-99.86	2,024.55	1,119.76	524.86	481.57	43.28	12.126	
7,325.00	6,681.80	7,496.99	7,055.56	30.67	25.89	-102.22	2,024.78	1,114.23	506.39	462.31	44.08	11.489	
7,350.00	6,705.76	7,490.12	7,055.26	30.72	25.87	-104.11	2,025.06	1,107.37	488.63	443.74	44.88	10.886	
7,375.00	6,729.31	7,481.96	7,054.87	30.78	25.84	-105.58	2,025.40	1,099.23	471.65	425.95	45.70	10.320	
7,400.00	6,752.39	7,472.56	7,054.40	30.83	25.81	-106.64	2,025.79	1,089.85	455.54	409.02	46.52	9.792	
7,425.00	6,774.94	7,461.98	7,053.84	30.87	25.78	-107.35	2,026.23	1,079.30	440.35	393.03	47.33	9.304	
7,450.00	6,796.89	7,450.81	7,053.19	30.92	25.74	-107.78	2,026.69	1,068.15	426.15	378.04	48.12	8.856	
7,475.00	6,818.19	7,436.53	7,052.31	30.96	25.69	-107.64	2,027.28	1,053.91	412.99	364.12	48.87	8.451	
7,500.00	6,838.77	7,421.38	7,051.22	30.99	25.65	-107.24	2,027.92	1,038.82	400.85	351.27	49.58	8.085	
7,525.00	6,858.58	7,405.43	7,049.91	31.03	25.60	-106.61	2,028.60	1,022.93	389.77	339.54	50.23	7.760	
7,550.00	6,877.57	7,388.73	7,048.37	31.05	25.54	-105.76	2,029.33	1,006.33	379.76	328.95	50.81	7.474	
7,575.00	6,895.68	7,371.35	7,046.56	31.08	25.49	-104.72	2,030.10	989.05	370.82	319.51	51.31	7.227	
7,600.00	6,912.86	7,352.76	7,044.42	31.10	25.43	-103.43	2,030.94	970.61	362.93	311.21	51.72	7.017	
7,625.00	6,929.07	7,332.91	7,041.90	31.12	25.38	-101.92	2,031.93	950.94	356.03	304.00	52.03	6.843	
7,650.00	6,944.26	7,312.46	7,039.07	31.14	25.32	-100.28	2,033.04	930.72	350.05	297.81	52.23	6.701	
7,675.00	6,958.39	7,291.44	7,035.92	31.15	25.25	-98.54	2,034.29	909.98	344.93	292.59	52.34	6.590	
7,700.00	6,971.42	7,269.91	7,032.42	31.16	25.19	-96.73	2,035.67	888.78	340.61	288.27	52.35	6.507	
7,725.00	6,983.32	7,251.23	7,028.98	31.16	25.14	-95.17	2,036.86	870.45	337.08	284.77	52.31	6.444	
7,750.00	6,994.05	7,233.62	7,025.01	31.16	25.09	-93.62	2,037.79	853.32	334.46	282.23	52.22	6.404	
7,775.00	7,003.58	7,216.40	7,020.45	31.16	25.04	-92.01	2,038.51	836.73	332.75	280.67	52.08	6.389 SF	
7,800.00	7,011.89	7,199.53	7,015.34	31.16	24.99	-90.36	2,039.02	820.67	331.94	280.05	51.90	6.396 ES	
7,810.33	7,014.97	7,192.66	7,013.08	31.15	24.96	-89.66	2,039.18	814.18	331.87	280.06	51.81	6.405 CC	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 271H - OH - OH													Offset Site Error: 0.00 usft	
Survey Program:		26-SuperiorQC MWD+IFR1+SAG+FDIR						Rule Assigned:				Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
7,825.00	7,018.96	7,182.98	7,009.71	31.15	24.94	-88.66	2,039.35	805.11	332.02	280.33	51.68	6.424		
7,850.00	7,024.76	7,170.99	7,005.26	31.14	24.90	-87.34	2,039.48	793.98	332.98	281.40	51.57	6.456		
7,875.00	7,029.29	7,148.93	6,996.38	31.12	24.83	-85.00	2,039.53	773.78	334.61	283.44	51.16	6.540		
7,900.00	7,032.52	7,131.60	6,988.86	31.11	24.78	-83.11	2,039.43	758.17	336.93	286.05	50.89	6.621		
7,925.00	7,034.44	7,114.37	6,980.92	31.09	24.72	-81.23	2,039.22	742.89	339.86	289.23	50.63	6.712		
7,950.00	7,035.06	7,097.24	6,972.57	31.07	24.67	-79.38	2,038.89	727.93	343.32	292.92	50.40	6.812		
7,958.14	7,034.98	7,091.68	6,969.76	31.06	24.65	-78.78	2,038.76	723.14	344.55	294.22	50.33	6.846		
8,000.00	7,034.21	7,059.89	6,952.95	31.03	24.56	-76.17	2,037.86	696.17	351.90	302.07	49.84	7.061		
8,100.00	7,032.37	6,979.99	6,908.42	30.96	24.31	-69.58	2,036.37	629.85	374.45	326.09	48.36	7.742		
8,200.00	7,030.53	6,913.63	6,866.87	30.89	24.11	-63.85	2,036.40	578.18	405.62	358.16	47.46	8.546		
8,300.00	7,028.69	6,864.66	6,832.03	30.84	23.96	-59.36	2,037.29	543.81	447.64	400.14	47.50	9.423		
8,400.00	7,026.85	6,827.72	6,803.25	30.79	23.84	-55.89	2,038.33	520.70	500.51	452.37	48.15	10.396		
8,500.00	7,025.01	6,788.99	6,770.96	30.75	23.71	-52.26	2,039.70	499.38	562.82	514.21	48.62	11.577		
8,600.00	7,023.17	6,788.99	6,770.96	30.72	23.71	-52.26	2,039.70	499.38	632.68	582.41	50.27	12.585		
8,700.00	7,021.33	6,749.97	6,736.69	30.70	23.58	-48.73	2,041.22	480.81	707.38	656.99	50.39	14.038		
8,800.00	7,019.49	6,730.96	6,719.49	30.71	23.52	-47.08	2,041.95	472.73	786.88	735.93	50.95	15.444		
8,900.00	7,017.65	6,694.99	6,686.17	30.74	23.39	-44.10	2,043.30	459.26	870.33	819.31	51.02	17.058		
9,000.00	7,015.81	6,694.99	6,686.17	30.85	23.39	-44.10	2,043.30	459.26	955.32	903.62	51.70	18.478		
9,100.00	7,013.97	6,694.99	6,686.17	31.07	23.39	-44.10	2,043.30	459.26	1,042.98	990.78	52.20	19.982		
9,200.00	7,012.13	6,694.99	6,686.17	31.47	23.39	-44.10	2,043.30	459.26	1,132.68	1,080.12	52.57	21.548		
9,300.00	7,010.29	6,658.00	6,651.15	31.98	23.26	-41.26	2,044.67	447.48	1,222.58	1,170.14	52.44	23.313		
9,400.00	7,008.44	6,646.07	6,639.73	32.57	23.22	-40.39	2,045.12	444.04	1,314.16	1,261.57	52.59	24.991		
9,500.00	7,006.60	6,635.21	6,629.30	33.21	23.18	-39.62	2,045.53	441.06	1,406.64	1,353.93	52.71	26.687		
9,600.00	7,004.76	6,599.99	6,595.18	33.88	23.06	-37.26	2,046.87	432.41	1,500.50	1,447.90	52.60	28.527		
9,700.00	7,002.92	6,599.99	6,595.18	34.58	23.06	-37.26	2,046.87	432.41	1,594.03	1,541.26	52.78	30.203		
9,800.00	7,001.08	6,599.99	6,595.18	35.30	23.06	-37.26	2,046.87	432.41	1,688.31	1,635.39	52.92	31.902		
9,900.00	6,999.24	6,599.99	6,595.18	36.05	23.06	-37.26	2,046.87	432.41	1,783.21	1,730.17	53.04	33.620		
10,000.00	6,997.40	6,599.99	6,595.18	36.82	23.06	-37.26	2,046.87	432.41	1,878.64	1,825.50	53.14	35.353		
10,100.00	6,995.56	6,599.99	6,595.18	37.60	23.06	-37.26	2,046.87	432.41	1,974.52	1,921.30	53.22	37.099		
10,200.00	6,993.72	6,599.99	6,595.18	38.40	23.06	-37.26	2,046.87	432.41	2,070.79	2,017.50	53.29	38.857		
10,300.00	6,991.88	6,599.99	6,595.18	39.22	23.06	-37.26	2,046.87	432.41	2,167.40	2,114.05	53.35	40.623		
10,400.00	6,990.04	6,599.99	6,595.18	40.06	23.06	-37.26	2,046.87	432.41	2,264.31	2,210.90	53.41	42.398		
10,500.00	6,988.20	6,599.99	6,595.18	40.90	23.06	-37.26	2,046.87	432.41	2,361.47	2,308.02	53.45	44.179		
10,600.00	6,986.36	6,562.68	6,558.64	41.76	22.93	-34.96	2,048.28	425.06	2,457.57	2,404.23	53.34	46.071		

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 272H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Rule Assigned:												Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	0.57	120.00	1.20	120.01				
100.00	100.00	100.21	100.21	0.25	0.13	0.65	119.93	1.36	119.94	119.56	0.38	317.348	
181.74	181.74	181.75	181.74	0.54	0.40	0.91	119.53	1.90	119.54	118.60	0.94	126.948	
200.00	200.00	199.24	199.24	0.61	0.46	0.95	119.59	1.99	119.61	118.54	1.07	111.900	
300.00	300.00	299.68	299.66	0.97	0.82	1.59	119.94	3.34	119.99	118.20	1.78	67.256	
400.00	400.00	399.41	399.37	1.33	1.17	2.57	120.54	5.41	120.66	118.16	2.50	48.281	
500.00	500.00	499.43	499.36	1.68	1.53	3.68	120.90	7.77	121.15	117.94	3.22	37.673	
600.00	600.00	599.34	599.26	2.04	1.89	4.54	121.33	9.62	121.72	117.78	3.93	30.952	
700.00	699.97	699.35	699.25	2.40	2.25	-21.27	121.83	11.22	120.31	115.67	4.65	25.881	
800.00	799.75	798.57	798.46	2.76	2.60	-21.75	122.45	12.77	114.97	109.61	5.36	21.436	
900.00	899.14	896.88	896.73	3.12	2.96	-22.85	123.93	14.98	106.54	100.47	6.07	17.541	
1,000.00	997.97	994.78	994.49	3.48	3.31	-23.90	126.59	19.39	95.48	88.70	6.78	14.078	
1,100.00	1,096.04	1,092.46	1,091.87	3.84	3.66	-25.06	130.63	25.86	81.99	74.51	7.49	10.950	
1,200.00	1,193.17	1,189.79	1,188.72	4.20	4.01	-27.15	136.28	33.66	66.34	58.15	8.19	8.098	
1,300.00	1,289.17	1,287.04	1,285.28	4.56	4.36	-31.77	143.83	42.38	48.97	40.08	8.90	5.505	
1,400.00	1,383.85	1,384.14	1,381.44	4.94	4.70	-44.09	153.52	51.77	30.93	21.32	9.61	3.219	
1,500.00	1,477.05	1,481.41	1,477.42	5.32	5.05	-86.03	165.61	61.87	17.52	7.16	10.35	1.692 Collision Risk Procedures Req.	
1,517.53	1,493.22	1,498.48	1,494.23	5.39	5.11	-98.77	167.95	63.69	17.05	6.59	10.47	1.629 Collision Risk Procedures Req., CC, ES	
1,600.00	1,568.57	1,578.58	1,573.04	5.71	5.40	-146.90	179.38	72.34	26.38	15.45	10.94	2.413	
1,700.00	1,658.25	1,674.77	1,667.59	6.11	5.74	-166.67	193.78	82.63	50.74	39.14	11.60	4.373	
1,783.60	1,731.68	1,754.25	1,745.70	6.45	6.03	-172.56	205.99	90.78	75.88	63.70	12.18	6.231	
1,800.00	1,745.94	1,769.76	1,760.94	6.52	6.09	-173.29	208.40	92.33	81.14	68.85	12.29	6.602	
1,900.00	1,832.90	1,864.20	1,853.76	6.94	6.43	-176.31	223.01	101.81	113.47	100.50	12.97	8.751	
2,000.00	1,919.86	1,958.22	1,946.20	7.37	6.77	-178.04	237.34	111.27	146.14	132.50	13.65	10.710	
2,100.00	2,006.82	2,052.29	2,038.73	7.80	7.11	-179.17	251.41	120.73	179.13	164.80	14.33	12.504	
2,200.00	2,093.78	2,145.94	2,130.89	8.24	7.46	-179.99	265.17	130.16	212.39	197.38	15.01	14.151	
2,300.00	2,180.73	2,241.18	2,224.60	8.69	7.81	179.42	279.22	139.71	245.64	229.94	15.70	15.648	
2,400.00	2,267.69	2,335.28	2,317.16	9.14	8.15	179.01	293.31	149.08	278.74	262.35	16.39	17.011	
2,500.00	2,354.65	2,429.33	2,409.69	9.59	8.50	178.66	307.26	158.54	311.94	294.87	17.08	18.269	
2,600.00	2,441.61	2,522.88	2,501.74	10.04	8.84	178.34	320.92	168.06	345.30	327.53	17.76	19.437	
2,700.00	2,528.57	2,616.74	2,594.12	10.50	9.19	178.05	334.41	177.73	378.81	360.35	18.46	20.524	
2,800.00	2,615.53	2,707.42	2,683.44	10.96	9.52	177.80	347.04	186.98	412.76	393.62	19.14	21.571	
2,900.00	2,702.48	2,798.09	2,772.88	11.42	9.86	177.61	359.08	195.77	447.47	427.66	19.81	22.586	
3,000.00	2,789.44	2,892.36	2,865.92	11.88	10.21	177.47	371.39	204.62	482.51	462.00	20.51	23.528	
3,100.00	2,876.40	2,986.70	2,959.01	12.35	10.55	177.36	383.91	213.44	517.37	496.17	21.21	24.397	
3,200.00	2,963.36	3,078.09	3,049.21	12.81	10.89	177.27	395.95	221.89	552.36	530.47	21.89	25.235	
3,300.00	3,050.32	3,167.51	3,137.54	13.28	11.22	177.20	407.32	229.84	587.89	565.33	22.56	26.061	
3,400.00	3,137.27	3,263.95	3,232.86	13.74	11.57	177.15	419.37	238.27	623.66	600.39	23.27	26.800	
3,500.00	3,224.23	3,362.61	3,330.23	14.21	11.94	177.08	432.35	247.33	658.69	634.69	24.00	27.448	
3,600.00	3,311.19	3,453.32	3,419.75	14.68	12.27	177.03	444.41	255.70	693.58	668.90	24.68	28.105	
3,700.00	3,398.15	3,543.31	3,508.63	15.15	12.60	177.00	456.09	263.64	728.90	703.55	25.35	28.750	
3,800.00	3,485.11	3,632.86	3,597.15	15.62	12.93	176.99	467.34	271.19	764.74	738.71	26.02	29.385	
3,900.00	3,572.06	3,723.67	3,686.97	16.09	13.27	176.99	478.47	278.61	800.93	774.22	26.70	29.992	
4,000.00	3,659.02	3,813.86	3,776.21	16.57	13.60	176.99	489.30	285.79	837.41	810.03	27.38	30.584	
4,100.00	3,745.98	3,904.93	3,866.39	17.04	13.93	177.00	499.91	292.83	874.29	846.23	28.06	31.156	
4,200.00	3,832.94	4,005.50	3,965.89	17.51	14.30	177.01	512.15	300.86	910.62	881.81	28.81	31.610	
4,300.00	3,919.90	4,094.28	4,053.72	17.99	14.63	177.01	522.96	307.99	946.93	917.46	29.48	32.126	
4,400.00	4,006.85	4,182.44	4,140.99	18.46	14.95	177.02	533.34	314.85	983.69	953.55	30.14	32.639	
4,500.00	4,093.81	4,269.15	4,226.91	18.93	15.27	177.03	543.16	321.25	1,020.98	990.19	30.79	33.159	
4,600.00	4,180.77	4,354.90	4,311.95	19.41	15.58	177.06	552.48	327.18	1,058.84	1,027.41	31.43	33.684	
4,700.00	4,267.73	4,442.23	4,398.61	19.88	15.90	177.09	561.56	332.91	1,097.23	1,065.14	32.09	34.193	
4,800.00	4,354.69	4,526.59	4,482.39	20.36	16.20	177.13	569.92	338.22	1,136.14	1,103.41	32.72	34.720	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 272H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,900.00	4,441.65	4,616.12	4,571.35	20.84	16.53	177.16	578.39	343.59	1,175.54	1,142.14	33.39	35.203		
5,000.00	4,528.60	4,705.51	4,660.19	21.31	16.85	177.20	586.82	348.76	1,215.04	1,180.97	34.06	35.670		
5,100.00	4,615.56	4,794.39	4,748.56	21.79	17.17	177.26	595.09	353.58	1,254.77	1,220.04	34.73	36.130		
5,200.00	4,702.52	4,880.94	4,834.63	22.26	17.49	177.31	602.97	358.14	1,294.75	1,259.38	35.38	36.598		
5,300.00	4,789.48	4,966.59	4,919.85	22.74	17.80	177.35	610.36	362.51	1,335.19	1,299.17	36.02	37.069		
5,400.00	4,876.44	5,047.16	5,000.04	23.22	18.09	177.40	617.08	366.34	1,376.01	1,339.39	36.62	37.575		
5,500.00	4,963.39	5,115.13	5,067.78	23.69	18.33	177.43	621.80	369.39	1,418.08	1,380.96	37.12	38.202		
5,600.00	5,050.35	5,182.08	5,134.57	24.17	18.57	177.44	625.34	372.26	1,461.61	1,424.00	37.61	38.867		
5,700.00	5,137.31	5,240.61	5,193.02	24.65	18.78	177.44	627.46	374.55	1,506.68	1,468.67	38.01	39.637		
5,800.00	5,224.27	5,305.99	5,258.37	25.13	19.00	177.45	628.26	376.23	1,553.96	1,515.49	38.47	40.395		
5,899.99	5,311.22	5,371.05	5,323.43	25.60	19.23	177.47	628.23	377.39	1,602.52	1,563.60	38.92	41.176		
5,908.16	5,318.32	5,378.46	5,330.83	25.64	19.25	177.47	628.23	377.52	1,606.49	1,567.52	38.97	41.219		
6,000.00	5,399.07	5,462.72	5,415.07	26.08	19.54	177.54	628.36	379.07	1,649.49	1,609.89	39.60	41.649		
6,100.00	5,488.91	5,554.64	5,506.98	26.53	19.86	177.60	628.64	380.78	1,692.43	1,652.14	40.29	42.010		
6,200.00	5,580.58	5,647.40	5,599.73	26.97	20.18	177.65	628.99	382.47	1,731.34	1,690.37	40.97	42.260		
6,300.00	5,673.90	5,739.97	5,692.28	27.39	20.50	177.68	629.35	384.15	1,766.20	1,724.56	41.64	42.414		
6,400.00	5,768.70	5,829.75	5,782.04	27.79	20.81	177.70	629.48	385.91	1,797.10	1,754.82	42.28	42.502		
6,500.00	5,864.80	5,924.51	5,876.79	28.18	21.14	177.71	629.35	387.65	1,824.12	1,781.16	42.96	42.462		
6,600.00	5,962.01	6,024.40	5,976.67	28.55	21.49	177.73	629.58	388.96	1,846.79	1,803.12	43.67	42.287		
6,700.00	6,060.15	6,121.82	6,074.08	28.89	21.83	177.76	630.12	389.64	1,865.16	1,820.80	44.36	42.048		
6,800.00	6,159.03	6,215.32	6,167.58	29.22	22.15	177.80	630.77	389.64	1,879.37	1,834.38	44.99	41.770		
6,900.00	6,258.47	6,307.20	6,259.45	29.53	22.46	177.85	631.42	388.76	1,889.64	1,844.05	45.59	41.444		
7,000.00	6,358.27	6,873.48	6,784.95	29.82	24.45	173.11	635.21	558.46	1,878.82	1,829.46	49.36	38.062		
7,091.75	6,450.00	7,014.81	6,882.93	30.07	24.95	-163.90	627.30	659.65	1,859.49	1,809.22	50.27	36.988		
7,100.00	6,458.25	7,026.22	6,889.87	30.10	24.99	-164.18	626.46	668.66	1,857.58	1,807.22	50.35	36.892		
7,199.35	6,557.60	7,119.13	6,942.60	30.36	25.33	-166.59	618.95	744.74	1,835.62	1,784.54	51.08	35.935		
7,199.99	6,558.23	7,119.85	6,942.99	30.36	25.33	-77.66	618.89	745.35	1,835.49	1,784.40	51.09	35.928		
7,225.00	6,583.23	7,146.56	6,956.92	30.43	25.43	-79.04	616.67	768.03	1,830.18	1,778.88	51.29	35.681		
7,250.00	6,608.15	7,169.32	6,968.48	30.49	25.52	-80.34	614.83	787.55	1,824.79	1,773.31	51.48	35.450		
7,275.00	6,632.93	7,188.32	6,977.88	30.55	25.59	-81.56	613.34	803.99	1,819.40	1,767.76	51.64	35.234		
7,300.00	6,657.50	7,205.83	6,986.35	30.61	25.65	-82.75	611.99	819.25	1,814.06	1,762.27	51.79	35.027		
7,325.00	6,681.80	7,221.79	6,993.77	30.67	25.72	-83.88	610.77	833.33	1,808.83	1,756.89	51.94	34.828		
7,350.00	6,705.76	7,232.28	6,998.48	30.72	25.76	-84.84	609.97	842.68	1,803.75	1,751.70	52.05	34.657		
7,375.00	6,729.31	7,238.46	7,001.18	30.78	25.78	-85.63	609.50	848.21	1,798.86	1,746.74	52.13	34.510		
7,400.00	6,752.39	7,241.20	7,002.37	30.83	25.79	-86.29	609.29	850.68	1,794.21	1,742.04	52.18	34.386		
7,425.00	6,774.94	7,241.17	7,002.36	30.87	25.79	-86.82	609.29	850.65	1,789.82	1,737.61	52.21	34.280		
7,450.00	6,796.89	7,238.88	7,001.37	30.92	25.78	-87.25	609.46	848.59	1,785.69	1,733.46	52.22	34.193		
7,475.00	6,818.19	7,234.72	6,999.55	30.96	25.77	-87.58	609.78	844.86	1,781.83	1,729.61	52.22	34.122		
7,500.00	6,838.77	7,229.01	6,997.02	30.99	25.74	-87.83	610.22	839.75	1,778.25	1,726.05	52.20	34.066		
7,525.00	6,858.58	7,221.99	6,993.86	31.03	25.72	-88.01	610.76	833.51	1,774.96	1,722.79	52.17	34.024		
7,550.00	6,877.57	7,213.86	6,990.13	31.05	25.69	-88.11	611.38	826.32	1,771.94	1,719.82	52.13	33.994		
7,575.00	6,895.68	7,205.17	6,986.05	31.08	25.65	-88.17	612.05	818.67	1,769.20	1,717.13	52.07	33.974		
7,600.00	6,912.86	7,194.54	6,980.92	31.10	25.61	-88.14	612.86	809.40	1,766.73	1,714.72	52.01	33.971		
7,625.00	6,929.07	7,182.70	6,975.12	31.12	25.57	-88.04	613.78	799.11	1,764.51	1,712.58	51.93	33.980		
7,650.00	6,944.26	7,169.74	6,968.68	31.14	25.52	-87.89	614.80	787.91	1,762.54	1,710.70	51.84	34.001		
7,675.00	6,958.39	7,155.75	6,961.62	31.15	25.46	-87.69	615.92	775.89	1,760.79	1,709.06	51.74	34.032		
7,700.00	6,971.42	7,140.81	6,953.96	31.16	25.41	-87.44	617.14	763.13	1,759.26	1,707.63	51.63	34.074		
7,725.00	6,983.32	7,125.02	6,945.72	31.16	25.35	-87.16	618.45	749.72	1,757.91	1,706.40	51.52	34.124		
7,750.00	6,994.05	7,108.44	6,936.91	31.16	25.29	-86.84	619.86	735.74	1,756.74	1,705.34	51.40	34.181		
7,775.00	7,003.58	7,095.73	6,930.04	31.16	25.24	-86.62	620.94	725.11	1,755.73	1,704.41	51.31	34.215		
7,800.00	7,011.89	7,083.73	6,923.42	31.16	25.20	-86.41	621.95	715.14	1,754.89	1,703.65	51.24	34.246		
7,825.00	7,018.96	7,071.32	6,916.43	31.15	25.15	-86.17	622.96	704.93	1,754.23	1,703.06	51.17	34.281		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 272H - OH - OH											Offset Site Error:		0.00 usft
Survey Program:		25-SuperiorQC MWD+IFR1+SAG+FDIR							Rule Assigned:		Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,850.00	7,024.76	7,058.53	6,909.09	31.14	25.11	-85.92	623.99	694.51	1,753.72	1,702.62	51.10	34.318	
7,875.00	7,029.29	7,045.39	6,901.40	31.12	25.06	-85.65	625.01	683.90	1,753.34	1,702.31	51.03	34.358	
7,900.00	7,032.52	7,031.93	6,893.37	31.11	25.01	-85.38	626.04	673.15	1,753.09	1,702.13	50.96	34.399	
7,925.00	7,034.44	7,009.99	6,879.94	31.09	24.93	-84.92	627.65	655.88	1,752.98	1,702.17	50.81	34.500	
7,943.51	7,035.03	7,009.99	6,879.94	31.08	24.93	-84.92	627.65	655.88	1,752.91	1,702.04	50.87	34.457	
7,950.00	7,035.06	7,009.99	6,879.94	31.07	24.93	-84.92	627.65	655.88	1,752.92	1,702.03	50.90	34.442	
7,958.14	7,034.98	7,009.99	6,879.94	31.06	24.93	-84.92	627.65	655.88	1,752.96	1,702.03	50.92	34.422	
8,000.00	7,034.21	6,980.17	6,860.91	31.03	24.83	-84.31	629.70	633.02	1,753.29	1,702.52	50.76	34.539	
8,100.00	7,032.37	6,915.99	6,816.60	30.96	24.60	-82.89	633.40	586.77	1,756.95	1,706.50	50.45	34.824	
8,200.00	7,030.53	6,915.99	6,816.60	30.89	24.60	-82.89	633.40	586.77	1,764.41	1,713.51	50.90	34.664	
8,300.00	7,028.69	6,863.53	6,777.30	30.84	24.42	-81.63	635.55	552.11	1,775.88	1,725.11	50.77	34.982	
8,400.00	7,026.85	6,820.99	6,743.60	30.79	24.27	-80.56	636.60	526.17	1,792.03	1,741.26	50.76	35.303	
8,500.00	7,025.01	6,820.99	6,743.60	30.75	24.27	-80.56	636.60	526.17	1,812.52	1,761.24	51.28	35.343	
8,600.00	7,023.17	6,777.84	6,707.95	30.72	24.11	-79.44	637.13	501.90	1,837.15	1,785.85	51.30	35.809	
8,700.00	7,021.33	6,753.32	6,687.08	30.70	24.03	-78.78	637.25	489.02	1,866.19	1,814.63	51.55	36.200	
8,800.00	7,019.49	6,726.99	6,664.21	30.71	23.94	-78.07	637.22	475.96	1,899.41	1,847.63	51.78	36.682	
8,900.00	7,017.65	6,726.99	6,664.21	30.74	23.94	-78.07	637.22	475.96	1,936.83	1,884.53	52.30	37.031	
9,000.00	7,015.81	6,688.93	6,630.40	30.85	23.80	-77.02	637.00	458.51	1,977.74	1,925.35	52.39	37.751	
9,100.00	7,013.97	6,670.60	6,613.81	31.07	23.74	-76.51	636.84	450.71	2,022.51	1,969.83	52.68	38.390	
9,200.00	7,012.13	6,631.99	6,578.29	31.47	23.60	-75.42	636.42	435.60	2,071.09	2,018.34	52.75	39.262	
9,300.00	7,010.29	6,631.99	6,578.29	31.98	23.60	-75.42	636.42	435.60	2,122.40	2,069.19	53.20	39.892	
9,400.00	7,008.44	6,631.99	6,578.29	32.57	23.60	-75.42	636.42	435.60	2,177.09	2,123.47	53.62	40.601	
9,500.00	7,006.60	6,631.99	6,578.29	33.21	23.60	-75.42	636.42	435.60	2,234.93	2,180.92	54.01	41.383	
9,600.00	7,004.76	6,631.99	6,578.29	33.88	23.60	-75.42	636.42	435.60	2,295.66	2,241.30	54.36	42.232	
9,700.00	7,002.92	6,593.24	6,541.88	34.58	23.46	-74.32	635.85	422.37	2,357.96	2,303.60	54.36	43.376	
9,800.00	7,001.08	6,584.14	6,533.22	35.30	23.43	-74.06	635.68	419.57	2,423.23	2,368.64	54.60	44.384	
9,900.00	6,999.24	6,575.72	6,525.17	36.05	23.40	-73.82	635.53	417.08	2,490.70	2,435.88	54.82	45.438	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 273H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference												Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	0.57	90.00	0.90	90.00				
100.00	100.00	99.72	99.72	0.25	0.13	0.85	90.11	1.33	90.12	89.74	0.38	237.796	
200.00	200.00	199.26	199.25	0.61	0.42	1.64	90.68	2.60	90.72	89.69	1.03	88.240	
300.00	300.00	299.09	299.07	0.97	0.78	2.22	91.60	3.55	91.68	89.93	1.74	52.575	
400.00	400.00	398.95	398.92	1.33	1.13	3.01	92.30	4.85	92.43	89.97	2.46	37.576	
500.00	500.00	499.21	499.16	1.68	1.49	3.60	93.21	5.86	93.40	90.22	3.18	29.393	
600.00	600.00	599.16	599.11	2.04	1.85	4.23	94.04	6.96	94.30	90.41	3.89	24.216	
700.00	699.97	698.99	698.93	2.40	2.21	-21.80	94.97	8.05	93.29	88.68	4.61	20.238	
800.00	799.75	798.77	798.70	2.76	2.57	-22.72	96.06	9.23	88.41	83.08	5.33	16.595	
900.00	899.14	899.47	899.37	3.12	2.93	-24.36	96.63	11.39	79.08	73.03	6.05	13.074	
1,000.00	997.97	999.87	999.69	3.48	3.28	-26.86	95.12	15.09	63.89	57.13	6.76	9.446	
1,100.00	1,096.04	1,099.02	1,098.64	3.84	3.63	-32.78	91.07	19.80	42.58	35.12	7.46	5.706	
1,200.00	1,193.17	1,195.65	1,194.88	4.20	3.97	-63.34	84.07	24.63	17.15	9.02	8.13	2.110	
1,234.26	1,226.19	1,227.97	1,227.03	4.33	4.08	-104.04	81.04	26.13	12.64	4.27	8.37	1.510	Collision Risk Procedures Req., CC, E
1,300.00	1,289.17	1,288.87	1,287.52	4.56	4.29	-164.28	74.50	28.81	27.45	18.63	8.82	3.112	
1,400.00	1,383.85	1,379.40	1,377.27	4.94	4.61	178.55	63.35	32.81	67.23	57.77	9.46	7.108	
1,500.00	1,477.05	1,466.96	1,463.90	5.32	4.92	173.77	51.43	37.22	113.17	103.09	10.08	11.227	
1,600.00	1,568.57	1,550.65	1,546.45	5.71	5.22	171.34	38.61	42.19	164.31	153.64	10.67	15.393	
1,700.00	1,658.25	1,630.91	1,625.31	6.11	5.51	169.68	24.77	47.89	220.46	209.21	11.25	19.600	
1,783.60	1,731.68	1,696.01	1,689.10	6.45	5.75	168.67	12.79	52.84	270.78	259.06	11.72	23.103	
1,800.00	1,745.94	1,708.76	1,701.58	6.52	5.79	168.57	10.40	53.83	280.93	269.11	11.82	23.770	
1,900.00	1,832.90	1,786.39	1,777.55	6.94	6.08	168.02	-4.32	60.02	342.92	330.55	12.37	27.719	
2,000.00	1,919.86	1,864.00	1,853.44	7.37	6.37	167.60	-19.26	66.40	405.10	392.17	12.93	31.331	
2,100.00	2,006.82	1,942.91	1,930.59	7.80	6.67	167.26	-34.50	72.98	467.31	453.80	13.51	34.601	
2,200.00	2,093.78	2,021.32	2,007.27	8.24	6.96	167.02	-49.53	79.46	529.44	515.36	14.08	37.603	
2,300.00	2,180.73	2,098.98	2,083.22	8.69	7.25	166.84	-64.44	85.79	591.62	576.97	14.65	40.381	
2,400.00	2,267.69	2,176.48	2,159.01	9.14	7.55	166.71	-79.41	91.97	653.92	638.69	15.22	42.954	
2,500.00	2,354.65	2,254.71	2,235.52	9.59	7.84	166.61	-94.53	98.13	716.25	700.44	15.81	45.317	
2,600.00	2,441.61	2,333.44	2,312.51	10.04	8.14	166.51	-109.75	104.47	778.55	762.15	16.39	47.489	
2,700.00	2,528.57	2,417.51	2,394.69	10.50	8.47	166.36	-125.84	111.88	840.56	823.53	17.03	49.356	
2,800.00	2,615.53	2,497.25	2,472.61	10.96	8.77	166.20	-140.91	119.62	902.21	884.58	17.63	51.166	
2,900.00	2,702.48	2,573.84	2,547.43	11.42	9.07	166.05	-155.45	127.18	963.91	945.69	18.21	52.930	
3,000.00	2,789.44	2,649.53	2,621.34	11.88	9.36	165.93	-170.02	134.46	1,025.85	1,007.07	18.78	54.615	
3,100.00	2,876.40	2,726.80	2,696.78	12.35	9.66	165.83	-185.01	141.73	1,087.96	1,068.59	19.37	56.166	
3,200.00	2,963.36	2,808.69	2,776.75	12.81	9.98	165.72	-200.83	149.62	1,149.97	1,129.97	20.00	57.507	
3,300.00	3,050.32	2,891.60	2,857.69	13.28	10.30	165.60	-216.68	158.06	1,211.71	1,191.08	20.63	58.726	
3,400.00	3,137.27	2,969.86	2,934.08	13.74	10.60	165.48	-231.56	166.35	1,273.31	1,252.08	21.23	59.967	
3,500.00	3,224.23	3,044.94	3,007.35	14.21	10.90	165.38	-245.94	174.22	1,335.03	1,313.22	21.81	61.212	
3,600.00	3,311.19	3,120.01	3,080.56	14.68	11.19	165.29	-260.54	182.00	1,397.02	1,374.63	22.39	62.403	
3,700.00	3,398.15	3,198.23	3,156.88	15.15	11.50	165.21	-275.79	189.92	1,459.08	1,436.09	22.99	63.465	
3,800.00	3,485.11	3,286.95	3,243.49	15.62	11.84	165.14	-292.89	198.69	1,521.04	1,497.36	23.68	64.241	
3,900.00	3,572.06	3,393.87	3,348.21	16.09	12.26	165.10	-311.89	208.85	1,581.87	1,557.37	24.50	64.559	
4,000.00	3,659.02	3,529.09	3,481.27	16.57	12.78	165.12	-332.52	221.15	1,640.91	1,615.39	25.53	64.285	
4,100.00	3,745.98	3,618.31	3,569.38	17.04	13.11	165.16	-344.10	229.09	1,698.06	1,671.85	26.21	64.794	
4,200.00	3,832.94	3,799.55	3,749.28	17.51	13.78	165.41	-361.87	241.50	1,753.37	1,725.88	27.49	63.776	
4,300.00	3,919.90	3,945.33	3,894.77	17.99	14.30	165.78	-367.24	248.57	1,803.31	1,774.82	28.50	63.281	
4,400.00	4,006.85	4,019.48	3,968.86	18.46	14.56	166.01	-369.24	250.79	1,853.20	1,824.12	29.07	63.745	
4,500.00	4,093.81	4,135.35	4,084.71	18.93	14.96	166.43	-370.79	252.01	1,902.34	1,872.46	29.88	63.658	
4,600.00	4,180.77	4,225.57	4,174.92	19.41	15.28	166.77	-371.30	252.46	1,951.07	1,920.52	30.55	63.870	
4,700.00	4,267.73	4,319.72	4,269.07	19.88	15.60	167.10	-371.52	252.93	1,999.56	1,968.33	31.23	64.022	
4,800.00	4,354.69	4,414.52	4,363.87	20.36	15.92	167.42	-371.40	253.25	2,047.83	2,015.91	31.92	64.165	
4,900.00	4,441.65	4,511.81	4,461.16	20.84	16.23	167.74	-370.72	253.54	2,095.66	2,063.05	32.60	64.276	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 273H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	4,528.60	4,600.94	4,550.29	21.31	16.52	168.03	-369.88	253.81	2,143.33	2,110.08	33.25	64.468	
5,100.00	4,615.56	4,690.60	4,639.94	21.79	16.81	168.30	-369.00	254.07	2,191.01	2,157.11	33.89	64.645	
5,200.00	4,702.52	4,787.06	4,736.39	22.26	17.12	168.58	-367.77	254.34	2,238.47	2,203.90	34.58	64.741	
5,300.00	4,789.48	4,883.60	4,832.92	22.74	17.43	168.86	-366.07	254.47	2,285.60	2,250.34	35.26	64.824	
5,400.00	4,876.44	4,976.87	4,926.17	23.22	17.73	169.12	-364.12	254.53	2,332.50	2,296.58	35.92	64.929	
5,500.00	4,963.39	5,070.27	5,019.54	23.69	18.03	169.38	-361.93	254.49	2,379.25	2,342.66	36.59	65.024	
5,600.00	5,050.35	5,164.03	5,113.27	24.17	18.34	169.62	-359.49	254.57	2,425.78	2,388.52	37.26	65.104	
5,700.00	5,137.31	5,253.45	5,202.66	24.65	18.63	169.85	-357.10	254.64	2,472.28	2,434.37	37.91	65.218	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 274H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 26-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	16.70	0.00	0.00	177.88	-2,148.50	79.70	2,150.04					
100.00	100.00	78.34	95.04	0.25	0.19	177.88	-2,148.57	79.50	2,150.04	2,149.61	0.44	4,912.532		
200.00	200.00	188.89	205.59	0.61	0.58	177.91	-2,148.88	78.46	2,150.32	2,149.13	1.19	1,804.694		
247.59	247.59	230.89	247.59	0.78	0.73	177.91	-2,148.82	78.38	2,150.25	2,148.74	1.51	1,427.248		
300.00	300.00	276.62	293.31	0.97	0.88	177.91	-2,148.86	78.29	2,150.30	2,148.45	1.85	1,161.660		
400.00	400.00	374.59	391.27	1.33	1.23	177.94	-2,149.04	77.48	2,150.45	2,147.89	2.56	840.679		
500.00	500.00	488.90	505.59	1.68	1.63	177.95	-2,148.75	76.91	2,150.13	2,146.81	3.32	648.395		
600.00	600.00	591.45	608.14	2.04	1.99	177.95	-2,148.43	77.02	2,149.83	2,145.80	4.03	533.673		
610.30	610.30	602.13	618.82	2.08	2.02	151.80	-2,148.39	77.04	2,149.81	2,145.70	4.10	524.095 CC, ES		
700.00	699.97	689.13	705.82	2.40	2.32	151.80	-2,148.06	77.17	2,151.38	2,146.65	4.73	455.209		
800.00	799.75	785.05	801.73	2.76	2.66	151.81	-2,147.89	77.23	2,156.97	2,151.55	5.42	397.888		
900.00	899.14	882.41	899.09	3.12	3.00	151.82	-2,147.85	77.56	2,166.54	2,160.42	6.12	354.067		
1,000.00	997.97	976.44	993.12	3.48	3.32	151.82	-2,147.91	78.36	2,180.08	2,173.28	6.81	320.318		
1,100.00	1,096.04	1,064.78	1,081.44	3.84	3.63	151.77	-2,148.23	80.34	2,197.76	2,190.29	7.47	294.061		
1,200.00	1,193.17	1,153.28	1,169.87	4.20	3.94	151.68	-2,148.92	83.76	2,219.69	2,211.55	8.14	272.630		
1,300.00	1,289.17	1,241.03	1,257.48	4.56	4.25	151.54	-2,149.90	88.51	2,245.72	2,236.92	8.81	255.023		
1,400.00	1,383.85	1,328.52	1,344.77	4.94	4.56	151.37	-2,151.18	94.38	2,275.83	2,266.36	9.47	240.379		
1,500.00	1,477.05	1,416.12	1,432.01	5.32	4.87	151.14	-2,152.68	102.05	2,309.86	2,299.73	10.13	228.067		
1,600.00	1,568.57	1,496.70	1,512.10	5.71	5.15	150.83	-2,154.28	110.80	2,347.76	2,337.00	10.76	218.195		
1,700.00	1,658.25	1,566.00	1,580.80	6.11	5.40	150.43	-2,156.18	119.64	2,389.89	2,378.54	11.35	210.650		
1,783.60	1,731.68	1,633.33	1,647.42	6.45	5.64	150.07	-2,158.42	129.12	2,428.18	2,416.31	11.87	204.578		
1,800.00	1,745.94	1,646.43	1,660.38	6.52	5.69	150.10	-2,158.87	131.04	2,435.95	2,423.97	11.97	203.430		
1,900.00	1,832.90	1,739.79	1,752.63	6.94	6.03	150.34	-2,162.07	145.02	2,483.30	2,470.66	12.64	196.467 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 375H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 26-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.30	0.00	0.00	0.00	9.27	1,983.10	323.60	2,009.33					
100.00	100.00	98.10	97.80	0.25	0.13	9.27	1,983.13	323.68	2,009.37	2,008.99	0.38	5,303.640		
200.00	200.00	195.19	194.89	0.61	0.31	9.28	1,983.25	324.03	2,009.55	2,008.64	0.92	2,190.602		
300.00	300.00	293.82	293.52	0.97	0.66	9.29	1,983.45	324.61	2,009.85	2,008.22	1.63	1,233.485		
400.00	400.00	377.02	376.72	1.33	0.96	9.31	1,983.87	325.07	2,010.46	2,008.18	2.28	879.894		
500.00	500.00	455.30	454.98	1.68	1.23	9.30	1,984.97	325.06	2,011.92	2,009.00	2.92	689.332		
600.00	600.00	561.34	560.99	2.04	1.61	9.27	1,987.34	324.36	2,014.01	2,010.36	3.65	552.015		
700.00	699.97	657.77	657.40	2.40	1.95	-16.93	1,989.39	323.75	2,013.92	2,009.57	4.35	463.270		
800.00	799.75	753.78	753.38	2.76	2.29	-17.03	1,991.62	323.33	2,009.89	2,004.84	5.05	398.209		
900.00	899.14	853.34	852.91	3.12	2.64	-17.20	1,994.00	323.03	2,001.78	1,996.02	5.76	347.319		
1,000.00	997.97	920.30	919.86	3.48	2.88	-17.39	1,995.59	322.89	1,989.80	1,983.44	6.36	312.849		
1,100.00	1,096.04	1,016.50	1,016.01	3.84	3.23	-17.69	1,998.74	322.55	1,974.33	1,967.26	7.06	279.494		
1,200.00	1,193.17	1,106.30	1,105.69	4.20	3.55	-18.06	2,003.25	321.94	1,956.37	1,948.63	7.74	252.670		
1,300.00	1,289.17	1,174.13	1,173.40	4.56	3.79	-18.45	2,007.34	321.32	1,935.20	1,926.86	8.34	232.056		
1,400.00	1,383.85	1,262.99	1,262.07	4.94	4.11	-18.99	2,013.02	320.35	1,910.57	1,901.56	9.01	211.992		
1,500.00	1,477.05	1,351.69	1,350.56	5.32	4.43	-19.63	2,019.04	319.17	1,882.39	1,872.71	9.68	194.395		
1,600.00	1,568.57	1,439.66	1,438.29	5.71	4.74	-20.38	2,025.32	317.71	1,850.70	1,840.35	10.35	178.811		
1,700.00	1,658.25	1,531.43	1,529.78	6.11	5.07	-21.29	2,032.13	315.86	1,815.51	1,804.48	11.03	164.616		
1,783.60	1,731.68	1,611.59	1,609.71	6.45	5.36	-22.19	2,037.94	313.92	1,783.17	1,771.57	11.61	153.620		
1,800.00	1,745.94	1,627.15	1,625.22	6.52	5.41	-22.31	2,039.05	313.50	1,776.57	1,764.85	11.72	151.540		
1,900.00	1,832.90	1,722.04	1,719.84	6.94	5.75	-23.07	2,045.65	310.81	1,736.27	1,723.87	12.40	140.011		
2,000.00	1,919.86	1,817.01	1,814.57	7.37	6.09	-23.86	2,051.92	308.25	1,695.93	1,682.84	13.08	129.617		
2,100.00	2,006.82	1,913.70	1,911.04	7.80	6.44	-24.70	2,057.93	305.82	1,655.51	1,641.73	13.78	120.158		
2,200.00	2,093.78	2,011.94	2,009.10	8.24	6.79	-25.60	2,063.49	303.38	1,614.88	1,600.40	14.48	111.522		
2,300.00	2,180.73	2,116.88	2,113.88	8.69	7.16	-26.60	2,068.68	300.83	1,573.93	1,558.72	15.21	103.507		
2,400.00	2,267.69	2,226.48	2,223.38	9.14	7.56	-27.70	2,072.66	298.47	1,532.13	1,516.19	15.95	96.088		
2,500.00	2,354.65	2,332.95	2,329.80	9.59	7.93	-28.83	2,075.10	296.46	1,489.50	1,472.83	16.67	89.345		
2,600.00	2,441.61	2,437.84	2,434.67	10.04	8.30	-30.01	2,076.23	294.71	1,446.16	1,428.76	17.39	83.147		
2,700.00	2,528.57	2,524.85	2,521.67	10.50	8.61	-31.04	2,076.64	293.29	1,402.68	1,384.60	18.08	77.598		
2,800.00	2,615.53	2,612.17	2,608.97	10.96	8.91	-32.15	2,077.00	291.73	1,359.59	1,340.82	18.77	72.442		
2,900.00	2,702.48	2,705.76	2,702.55	11.42	9.23	-33.41	2,077.17	290.07	1,316.76	1,297.28	19.47	67.615		
3,000.00	2,789.44	2,800.08	2,796.86	11.88	9.56	-34.75	2,076.79	288.67	1,273.92	1,253.73	20.19	63.106		
3,100.00	2,876.40	2,893.66	2,890.42	12.35	9.87	-36.17	2,075.88	287.60	1,231.12	1,210.23	20.90	58.910		
3,200.00	2,963.36	2,986.85	2,983.61	12.81	10.19	-37.65	2,074.47	286.96	1,188.43	1,166.82	21.62	54.981		
3,300.00	3,050.32	3,072.26	3,068.99	13.28	10.47	-39.10	2,072.92	286.60	1,146.11	1,123.78	22.33	51.315		
3,400.00	3,137.27	3,155.88	3,152.60	13.74	10.75	-40.62	2,071.56	286.12	1,104.70	1,081.63	23.07	47.892		
3,500.00	3,224.23	3,240.46	3,237.18	14.21	11.04	-42.26	2,070.34	285.55	1,064.28	1,040.46	23.81	44.691		
3,600.00	3,311.19	3,325.94	3,322.64	14.68	11.33	-44.02	2,069.22	285.07	1,024.85	1,000.28	24.58	41.698		
3,700.00	3,398.15	3,409.62	3,406.32	15.15	11.61	-45.86	2,068.24	284.70	986.56	961.20	25.36	38.904		
3,800.00	3,485.11	3,492.60	3,489.30	15.62	11.89	-47.79	2,067.58	284.30	949.72	923.56	26.16	36.306		
3,900.00	3,572.06	3,576.16	3,572.86	16.09	12.18	-49.87	2,067.18	283.82	914.43	887.45	26.98	33.892		
4,000.00	3,659.02	3,659.82	3,656.51	16.57	12.47	-52.08	2,067.08	283.28	880.87	853.05	27.82	31.659		
4,100.00	3,745.98	3,745.99	3,742.68	17.04	12.78	-54.50	2,067.12	282.67	849.05	820.37	28.69	29.596		
4,200.00	3,832.94	3,832.53	3,829.21	17.51	13.08	-57.08	2,067.17	281.97	819.06	789.49	29.57	27.698		
4,300.00	3,919.90	3,917.17	3,913.86	17.99	13.38	-59.76	2,067.32	281.19	791.19	760.72	30.47	25.967		
4,400.00	4,006.85	4,002.78	3,999.46	18.46	13.69	-62.62	2,067.66	280.32	765.73	734.34	31.38	24.400		
4,500.00	4,093.81	4,088.10	4,084.78	18.93	13.99	-65.62	2,068.07	279.30	742.84	710.53	32.30	22.996		
4,600.00	4,180.77	4,173.70	4,170.37	19.41	14.30	-68.77	2,068.64	278.17	722.81	689.58	33.23	21.753		
4,700.00	4,267.73	4,259.15	4,255.81	19.88	14.60	-72.03	2,069.41	277.05	705.81	671.66	34.15	20.670		
4,800.00	4,354.69	4,344.36	4,340.99	20.36	14.90	-75.39	2,070.35	275.76	692.15	657.10	35.05	19.746		
4,900.00	4,441.65	4,430.32	4,426.94	20.84	15.21	-78.85	2,071.54	274.45	681.93	645.99	35.94	18.975		
5,000.00	4,528.60	4,518.23	4,514.83	21.31	15.52	-82.45	2,073.02	273.07	675.29	638.49	36.80	18.351		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 375H - OH - OH												Offset Site Error:	0.00 usft
Survey Program:		26-SuperiorQC MWD+IFR1+SAG+FDIR							Rule Assigned:			Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,615.56	4,617.59	4,614.17	21.79	15.87	-86.54	2,074.43	272.83	670.96	633.31	37.65	17.819	
5,190.90	4,694.60	4,696.91	4,693.48	22.22	16.15	-89.81	2,075.42	273.20	669.51	631.14	38.37	17.450	
5,200.00	4,702.52	4,704.77	4,701.35	22.26	16.18	-90.13	2,075.52	273.23	669.53	631.09	38.44	17.419	
5,300.00	4,789.48	4,791.65	4,788.21	22.74	16.49	-93.70	2,076.78	273.59	671.65	632.48	39.18	17.145	
5,400.00	4,876.44	4,885.16	4,881.72	23.22	16.81	-97.56	2,077.30	274.12	676.84	636.95	39.89	16.969	
5,500.00	4,963.39	4,972.82	4,969.38	23.69	17.10	-101.18	2,076.88	274.76	685.10	644.58	40.52	16.907	
5,600.00	5,050.35	5,058.34	5,054.89	24.17	17.39	-104.63	2,076.59	275.36	696.83	655.72	41.11	16.951	
5,700.00	5,137.31	5,146.66	5,143.21	24.65	17.69	-108.05	2,076.85	276.02	711.81	670.14	41.67	17.081	
5,800.00	5,224.27	5,234.11	5,230.65	25.13	18.00	-111.29	2,077.53	276.84	729.62	687.41	42.21	17.286	
5,899.99	5,311.22	5,321.10	5,317.63	25.60	18.30	-114.36	2,078.32	277.60	750.18	707.47	42.72	17.561	
5,908.16	5,318.32	5,328.20	5,324.74	25.64	18.33	-114.61	2,078.38	277.66	751.98	709.22	42.76	17.586	
6,000.00	5,399.07	5,408.56	5,405.09	26.08	18.61	-117.68	2,079.15	278.29	772.49	729.27	43.22	17.875	
6,100.00	5,488.91	5,498.07	5,494.60	26.53	18.92	-120.69	2,080.06	278.86	794.89	751.17	43.72	18.182	
6,200.00	5,580.58	5,592.85	5,589.37	26.97	19.25	-123.49	2,080.35	279.59	816.60	772.35	44.25	18.453	
6,300.00	5,673.90	5,691.54	5,688.01	27.39	19.59	-126.15	2,077.83	281.45	836.64	791.85	44.79	18.678	
6,400.00	5,768.70	5,790.22	5,786.63	27.79	19.92	-128.41	2,075.67	283.88	854.59	809.25	45.34	18.849	
6,500.00	5,864.80	5,885.89	5,882.27	28.18	20.25	-130.21	2,074.51	286.26	870.38	824.50	45.88	18.972	
6,600.00	5,962.01	5,982.96	5,979.31	28.55	20.58	-131.67	2,073.97	288.35	884.03	837.59	46.44	19.036	
6,700.00	6,060.15	6,080.62	6,076.95	28.89	20.91	-132.82	2,073.83	290.38	895.08	848.07	47.02	19.038	
6,800.00	6,159.03	6,176.21	6,172.53	29.22	21.25	-133.66	2,073.94	292.07	903.60	856.02	47.59	18.989	
6,900.00	6,258.47	6,273.70	6,270.00	29.53	21.58	-134.26	2,074.06	293.40	909.59	861.41	48.18	18.879	
7,000.00	6,358.27	6,371.77	6,368.07	29.82	21.92	-134.62	2,073.87	294.69	912.74	863.96	48.78	18.711	
7,091.75	6,450.00	6,462.97	6,459.25	30.07	22.24	-108.62	2,073.28	295.87	913.09	863.75	49.34	18.505	
7,100.00	6,458.25	6,471.21	6,467.50	30.10	22.26	-108.62	2,073.21	295.98	913.01	863.62	49.39	18.484	
7,199.35	6,557.60	6,563.01	6,559.28	30.36	22.58	-108.70	2,072.25	296.97	912.33	862.39	49.94	18.268	
7,199.99	6,558.23	6,563.58	6,559.86	30.36	22.58	-19.75	2,072.24	296.98	912.33	862.39	49.95	18.266	
7,225.00	6,583.23	6,585.99	6,582.26	30.43	22.66	-19.81	2,071.93	297.09	911.67	861.60	50.07	18.206	
7,250.00	6,608.15	6,610.72	6,606.99	30.49	22.74	-19.95	2,071.57	297.19	909.82	859.60	50.22	18.117	
7,275.00	6,632.93	6,635.07	6,631.34	30.55	22.83	-20.17	2,071.20	297.28	906.76	856.40	50.36	18.007	
7,300.00	6,657.50	6,659.22	6,655.48	30.61	22.91	-20.47	2,070.81	297.36	902.50	852.01	50.49	17.875	
7,325.00	6,681.80	6,683.27	6,679.53	30.67	22.99	-20.87	2,070.41	297.43	897.05	846.43	50.62	17.721	
7,350.00	6,705.76	6,708.78	6,705.04	30.72	23.08	-21.36	2,070.05	297.51	890.40	839.64	50.76	17.541	
7,375.00	6,729.31	6,733.86	6,730.12	30.78	23.17	-21.96	2,069.81	297.60	882.55	831.66	50.90	17.340	
7,400.00	6,752.39	6,758.43	6,754.69	30.83	23.25	-22.66	2,069.70	297.69	873.54	822.51	51.02	17.120	
7,425.00	6,774.94	6,783.08	6,779.34	30.87	23.34	-23.49	2,069.69	297.78	863.38	812.23	51.15	16.879	
7,450.00	6,796.89	6,808.42	6,804.67	30.92	23.42	-24.47	2,069.73	297.96	852.08	800.79	51.28	16.615	
7,475.00	6,818.19	6,832.87	6,829.12	30.96	23.51	-25.63	2,069.78	298.23	839.67	788.26	51.41	16.334	
7,500.00	6,838.77	6,856.36	6,852.61	30.99	23.59	-26.96	2,069.85	298.58	826.20	774.68	51.52	16.038	
7,525.00	6,858.58	6,877.61	6,873.86	31.03	23.67	-28.48	2,069.93	298.96	811.73	760.13	51.60	15.730	
7,550.00	6,877.57	6,896.15	6,892.39	31.05	23.73	-30.16	2,070.00	299.31	796.38	744.72	51.67	15.414	
7,575.00	6,895.68	6,913.80	6,910.04	31.08	23.79	-32.08	2,070.06	299.64	780.21	728.49	51.72	15.086	
7,600.00	6,912.86	6,930.53	6,926.76	31.10	23.85	-34.27	2,070.12	299.94	763.28	711.52	51.76	14.746	
7,625.00	6,929.07	6,946.27	6,942.51	31.12	23.91	-36.75	2,070.17	300.23	745.64	693.85	51.79	14.397	
7,650.00	6,944.26	6,960.99	6,957.23	31.14	23.96	-39.57	2,070.22	300.50	727.37	675.55	51.81	14.038	
7,675.00	6,958.39	6,974.52	6,970.75	31.15	24.00	-42.73	2,070.27	300.74	708.53	656.70	51.82	13.672	
7,700.00	6,971.42	6,986.92	6,983.15	31.16	24.05	-46.26	2,070.31	300.96	689.19	637.37	51.82	13.299	
7,725.00	6,983.32	6,998.21	6,994.44	31.16	24.09	-50.16	2,070.34	301.15	669.43	617.62	51.81	12.921	
7,750.00	6,994.05	7,008.37	7,004.59	31.16	24.12	-54.43	2,070.38	301.32	649.34	597.55	51.79	12.538	
7,775.00	7,003.58	7,017.35	7,013.58	31.16	24.15	-59.03	2,070.40	301.47	628.98	577.22	51.76	12.153	
7,800.00	7,011.89	7,025.14	7,021.36	31.16	24.18	-63.86	2,070.43	301.60	608.45	556.74	51.72	11.765	
7,825.00	7,018.96	7,031.71	7,027.93	31.15	24.20	-68.85	2,070.45	301.70	587.84	536.18	51.66	11.378	
7,850.00	7,024.76	7,037.04	7,033.26	31.14	24.22	-73.84	2,070.46	301.79	567.24	515.64	51.60	10.992	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 375H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 26-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
7,875.00	7,029.29	7,041.11	7,037.33	31.12	24.24	-78.70	2,070.48	301.85	546.75	495.22	51.53	10.610		
7,900.00	7,032.52	7,043.91	7,040.13	31.11	24.25	-83.31	2,070.48	301.90	526.47	475.02	51.46	10.231		
7,925.00	7,034.44	7,045.43	7,041.65	31.09	24.25	-87.56	2,070.49	301.92	506.51	455.14	51.37	9.860		
7,950.00	7,035.06	7,045.66	7,041.88	31.07	24.25	-91.35	2,070.49	301.92	486.98	435.70	51.28	9.496		
7,958.14	7,034.98	7,045.46	7,041.68	31.06	24.25	-92.49	2,070.49	301.92	480.73	429.48	51.25	9.380		
8,000.00	7,034.21	7,044.05	7,040.28	31.03	24.25	-92.23	2,070.48	301.90	449.56	398.47	51.10	8.798		
8,100.00	7,032.37	7,040.69	7,036.91	30.96	24.24	-91.61	2,070.47	301.85	383.41	332.61	50.80	7.547		
8,200.00	7,030.53	7,037.31	7,033.53	30.89	24.22	-90.98	2,070.46	301.79	334.48	283.62	50.86	6.577		
8,300.00	7,028.69	7,033.90	7,030.13	30.84	24.21	-90.35	2,070.45	301.74	311.01	259.42	51.59	6.028		
8,325.84	7,028.22	7,033.02	7,029.24	30.83	24.21	-90.19	2,070.45	301.72	309.94	258.04	51.89	5.973 CC, ES, SF		
8,400.00	7,026.85	7,030.48	7,026.70	30.79	24.20	-89.72	2,070.44	301.68	318.68	265.85	52.82	6.033		
8,500.00	7,025.01	7,027.03	7,023.25	30.75	24.19	-89.08	2,070.43	301.63	355.47	301.59	53.88	6.597		
8,600.00	7,023.17	7,023.56	7,019.79	30.72	24.18	-88.44	2,070.42	301.57	413.69	359.20	54.49	7.593		
8,700.00	7,021.33	7,020.07	7,016.30	30.70	24.16	-87.80	2,070.41	301.52	485.69	430.95	54.74	8.872		
8,800.00	7,019.49	7,016.56	7,012.78	30.71	24.15	-87.15	2,070.40	301.46	566.24	511.42	54.82	10.329		
8,900.00	7,017.65	7,013.02	7,009.25	30.74	24.14	-86.50	2,070.39	301.40	652.18	597.36	54.81	11.899		
9,000.00	7,015.81	7,009.47	7,005.69	30.85	24.13	-85.85	2,070.38	301.34	741.63	686.86	54.77	13.541		
9,100.00	7,013.97	7,005.89	7,002.12	31.07	24.11	-85.19	2,070.37	301.28	833.47	778.76	54.71	15.234		
9,200.00	7,012.13	7,002.29	6,998.51	31.47	24.10	-84.53	2,070.36	301.22	926.99	872.33	54.65	16.961		
9,300.00	7,010.29	6,998.66	6,994.89	31.98	24.09	-83.87	2,070.34	301.16	1,021.72	967.12	54.60	18.714		
9,400.00	7,008.44	6,995.02	6,991.24	32.57	24.08	-83.20	2,070.33	301.10	1,117.36	1,062.81	54.54	20.485		
9,500.00	7,006.60	6,991.34	6,987.57	33.21	24.06	-82.54	2,070.32	301.03	1,213.69	1,159.19	54.50	22.271		
9,600.00	7,004.76	6,987.65	6,983.88	33.88	24.05	-81.87	2,070.31	300.97	1,310.56	1,256.11	54.45	24.067		
9,700.00	7,002.92	6,983.93	6,980.16	34.58	24.04	-81.20	2,070.30	300.91	1,407.86	1,353.45	54.42	25.873		
9,800.00	7,001.08	6,980.19	6,976.42	35.30	24.02	-80.52	2,070.29	300.84	1,505.51	1,451.13	54.38	27.685		
9,900.00	6,999.24	6,976.42	6,972.65	36.05	24.01	-79.85	2,070.27	300.77	1,603.43	1,549.08	54.35	29.502		
10,000.00	6,997.40	6,972.63	6,968.86	36.82	24.00	-79.17	2,070.26	300.71	1,701.59	1,647.27	54.32	31.324		
10,100.00	6,995.56	6,968.82	6,965.05	37.60	23.98	-78.49	2,070.25	300.64	1,799.95	1,745.65	54.30	33.149		
10,200.00	6,993.72	6,964.98	6,961.21	38.40	23.97	-77.82	2,070.24	300.57	1,898.47	1,844.19	54.28	34.977		
10,300.00	6,991.88	6,961.28	6,957.52	39.22	23.96	-77.17	2,070.22	300.50	1,997.13	1,942.87	54.26	36.807		
10,400.00	6,990.04	6,957.59	6,953.82	40.06	23.94	-76.52	2,070.21	300.44	2,095.91	2,041.67	54.24	38.638		
10,500.00	6,988.20	6,953.88	6,950.12	40.90	23.93	-75.88	2,070.20	300.37	2,194.79	2,140.56	54.23	40.471		
10,600.00	6,986.36	6,950.17	6,946.41	41.76	23.92	-75.23	2,070.19	300.30	2,293.77	2,239.55	54.22	42.305		
10,700.00	6,984.52	6,946.46	6,942.69	42.64	23.91	-74.60	2,070.17	300.23	2,392.82	2,338.61	54.21	44.139		
10,800.00	6,982.68	6,942.74	6,938.97	43.52	23.89	-73.96	2,070.16	300.17	2,491.95	2,437.75	54.20	45.974		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 376H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	4.00	0.00	0.00	0.57	150.00	1.50	150.06				
100.00	100.00	95.07	99.06	0.25	0.13	0.53	150.22	1.38	150.23	149.85	0.38	400.076	
200.00	200.00	195.18	199.17	0.61	0.45	0.39	150.81	1.03	150.81	149.75	1.06	141.891	
300.00	300.00	295.81	299.81	0.97	0.81	0.15	151.08	0.38	151.08	149.30	1.78	85.024	
400.00	400.00	397.03	401.02	1.33	1.16	-0.03	150.77	-0.07	150.78	148.29	2.49	60.663	
500.00	500.00	497.69	501.68	1.68	1.51	-0.18	149.66	-0.48	149.67	146.48	3.19	46.882	
600.00	600.00	597.29	601.26	2.04	1.86	-0.48	148.63	-1.25	148.64	144.74	3.90	38.104	
700.00	699.97	696.77	700.74	2.40	2.21	-27.33	147.97	-1.96	146.04	141.43	4.61	31.663	
800.00	799.75	796.86	800.82	2.76	2.57	-28.93	147.38	-2.65	139.70	134.37	5.33	26.213	
900.00	899.14	897.54	901.49	3.12	2.93	-31.72	146.12	-3.23	129.09	123.04	6.05	21.344	
1,000.00	997.97	997.14	1,001.07	3.48	3.28	-36.11	143.80	-3.24	114.11	107.35	6.76	16.882	
1,100.00	1,096.04	1,094.12	1,098.01	3.84	3.62	-43.14	141.39	-2.84	96.44	88.98	7.46	12.931	
1,200.00	1,193.17	1,189.60	1,193.49	4.20	3.95	-54.53	140.43	-2.02	79.22	71.07	8.15	9.724	
1,300.00	1,289.17	1,284.69	1,288.56	4.56	4.27	-72.54	141.67	-0.94	66.58	57.74	8.83	7.537	
1,370.38	1,355.95	1,351.81	1,355.64	4.83	4.50	-89.13	143.92	-0.03	63.47	54.15	9.32	6.809 CC, ES	
1,400.00	1,383.85	1,380.08	1,383.87	4.94	4.59	-96.51	145.18	0.43	64.07	54.54	9.52	6.726 SF	
1,500.00	1,477.05	1,475.65	1,479.29	5.32	4.92	-119.61	150.29	2.42	74.77	64.57	10.20	7.328	
1,600.00	1,568.57	1,570.76	1,574.17	5.71	5.25	-136.69	156.06	5.34	96.70	85.84	10.86	8.901	
1,700.00	1,658.25	1,664.89	1,668.01	6.11	5.58	-148.04	162.31	9.24	126.55	115.04	11.52	10.988	
1,783.60	1,731.68	1,742.86	1,745.68	6.45	5.85	-154.50	168.03	13.09	155.98	143.91	12.06	12.932	
1,800.00	1,745.94	1,758.10	1,760.85	6.52	5.90	-155.60	169.21	13.90	162.10	149.93	12.17	13.319	
1,900.00	1,832.90	1,852.41	1,854.67	6.94	6.23	-160.89	177.11	19.43	199.51	186.70	12.81	15.570	
2,000.00	1,919.86	1,948.94	1,950.49	7.37	6.57	-164.51	186.62	26.07	236.26	222.78	13.47	17.538	
2,100.00	2,006.82	2,046.25	2,046.86	7.80	6.91	-167.11	197.74	33.80	271.78	257.64	14.14	19.224	
2,200.00	2,093.78	2,141.95	2,141.45	8.24	7.25	-169.11	209.51	42.34	306.44	291.63	14.81	20.696	
2,300.00	2,180.73	2,234.37	2,232.76	8.69	7.58	-170.70	220.89	50.95	341.12	325.65	15.47	22.047	
2,400.00	2,267.69	2,326.87	2,324.19	9.14	7.91	-172.05	231.90	59.64	376.28	360.14	16.14	23.312	
2,500.00	2,354.65	2,419.00	2,415.28	9.59	8.23	-173.20	242.56	68.38	411.82	395.01	16.81	24.498	
2,600.00	2,441.61	2,512.83	2,508.06	10.04	8.57	-174.19	253.35	77.22	447.57	430.08	17.49	25.592	
2,700.00	2,528.57	2,606.91	2,601.08	10.50	8.91	-175.00	264.46	86.00	483.22	465.05	18.17	26.594	
2,800.00	2,615.53	2,701.07	2,694.15	10.96	9.25	-175.67	275.83	94.67	518.77	499.92	18.85	27.514	
2,900.00	2,702.48	2,794.58	2,786.56	11.42	9.58	-176.23	287.33	103.11	554.28	534.74	19.54	28.369	
3,000.00	2,789.44	2,888.14	2,879.02	11.88	9.92	-176.72	298.85	111.58	589.81	569.58	20.22	29.164	
3,100.00	2,876.40	2,980.75	2,970.54	12.35	10.26	-177.17	310.15	120.10	625.39	604.49	20.91	29.915	
3,200.00	2,963.36	3,071.08	3,059.84	12.81	10.58	-177.58	320.83	128.53	661.27	639.69	21.58	30.646	
3,300.00	3,050.32	3,161.46	3,149.25	13.28	10.91	-177.96	331.09	136.86	697.60	675.35	22.25	31.353	
3,400.00	3,137.27	3,252.66	3,239.51	13.74	11.24	-178.31	341.18	145.15	734.26	711.34	22.93	32.026	
3,500.00	3,224.23	3,341.49	3,327.45	14.21	11.56	-178.64	350.72	153.28	771.20	747.60	23.59	32.690	
3,600.00	3,311.19	3,430.85	3,416.02	14.68	11.89	-178.94	359.61	161.13	808.95	784.69	24.26	33.346	
3,700.00	3,398.15	3,534.61	3,518.77	15.15	12.26	-179.17	371.38	169.57	845.82	820.81	25.01	33.819	
3,800.00	3,485.11	3,627.42	3,610.62	15.62	12.60	-179.28	382.76	176.46	882.26	856.56	25.70	34.330	
3,900.00	3,572.06	3,718.10	3,700.39	16.09	12.93	-179.36	393.88	182.74	918.91	892.53	26.38	34.838	
4,000.00	3,659.02	3,810.36	3,791.74	16.57	13.26	-179.48	404.76	189.69	955.70	928.64	27.06	35.313	
4,100.00	3,745.98	3,903.00	3,883.47	17.04	13.60	-179.60	415.55	196.84	992.54	964.79	27.75	35.763	
4,200.00	3,832.94	3,995.60	3,975.17	17.51	13.94	-179.71	426.36	203.88	1,029.41	1,000.97	28.44	36.191	
4,300.00	3,919.90	4,088.30	4,066.98	17.99	14.28	-179.79	437.25	210.70	1,066.32	1,037.18	29.13	36.600	
4,400.00	4,006.85	4,181.40	4,159.18	18.46	14.61	-179.86	448.31	217.33	1,103.22	1,073.39	29.83	36.985	
4,500.00	4,093.81	4,274.61	4,251.49	18.93	14.95	-179.91	459.46	223.81	1,140.12	1,109.60	30.52	37.352	
4,600.00	4,180.77	4,369.14	4,345.11	19.41	15.30	-179.95	470.99	230.11	1,176.94	1,145.71	31.23	37.690	
4,700.00	4,267.73	4,464.27	4,439.29	19.88	15.64	-179.96	482.84	236.30	1,213.62	1,181.68	31.93	38.004	
4,800.00	4,354.69	4,559.53	4,533.58	20.36	15.99	-179.97	494.94	242.43	1,250.11	1,217.47	32.64	38.297	
4,900.00	4,441.65	4,652.47	4,625.56	20.84	16.33	-179.97	506.93	248.23	1,286.52	1,253.18	33.34	38.591	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 376H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.00	4,528.60	4,742.34	4,714.52	21.31	16.66	-179.95	518.56	253.46	1,323.06	1,289.05	34.01	38.899	
5,100.00	4,615.56	4,830.42	4,801.74	21.79	16.98	-179.92	529.83	258.23	1,359.90	1,325.23	34.68	39.216	
5,200.00	4,702.52	4,918.48	4,888.99	22.26	17.30	-179.88	540.91	262.67	1,397.07	1,361.73	35.34	39.531	
5,300.00	4,789.48	5,005.99	4,975.73	22.74	17.61	-179.84	551.77	266.74	1,434.57	1,398.56	36.00	39.847	
5,400.00	4,876.44	5,056.57	5,025.97	23.22	17.80	-179.81	557.30	268.75	1,473.55	1,437.14	36.41	40.469	
5,500.00	4,963.39	5,109.22	5,078.41	23.69	17.99	-179.80	561.62	270.34	1,515.12	1,478.31	36.81	41.156	
5,600.00	5,050.35	5,195.99	5,164.94	24.17	18.30	-179.77	567.71	272.47	1,557.95	1,520.48	37.46	41.584	
5,700.00	5,137.31	5,281.06	5,249.80	24.65	18.60	-179.74	573.50	274.38	1,601.03	1,562.93	38.10	42.019	
5,800.00	5,224.27	5,341.82	5,310.43	25.13	18.82	-179.73	577.10	275.65	1,644.92	1,606.36	38.55	42.668	
5,899.99	5,311.22	5,406.26	5,374.82	25.60	19.04	-179.73	579.64	276.74	1,690.47	1,651.45	39.02	43.320	
5,908.16	5,318.32	5,413.21	5,381.76	25.64	19.07	-179.73	579.87	276.85	1,694.24	1,655.16	39.08	43.358	
6,000.00	5,399.07	5,491.14	5,459.64	26.08	19.34	-179.74	582.44	278.06	1,735.01	1,695.35	39.65	43.753	
6,100.00	5,488.91	5,572.99	5,541.44	26.53	19.63	-179.75	584.76	279.31	1,775.99	1,735.74	40.26	44.118	
6,200.00	5,580.58	5,656.95	5,625.37	26.97	19.93	-179.77	586.71	280.51	1,813.43	1,772.56	40.87	44.374	
6,300.00	5,673.90	5,742.18	5,710.59	27.39	20.23	-179.79	588.26	281.67	1,847.25	1,805.77	41.48	44.530	
6,400.00	5,768.70	5,831.22	5,799.60	27.79	20.54	-179.82	589.41	282.95	1,877.34	1,835.21	42.12	44.567	
6,500.00	5,864.80	5,927.84	5,896.21	28.18	20.88	-179.84	590.53	284.20	1,903.42	1,860.60	42.82	44.452	
6,600.00	5,962.01	6,019.44	5,987.80	28.55	21.20	-179.85	591.73	284.95	1,925.34	1,881.87	43.47	44.295	
6,700.00	6,060.15	6,115.76	6,084.11	28.89	21.54	-179.84	592.97	285.14	1,943.28	1,899.13	44.14	44.022	
6,800.00	6,159.03	6,205.19	6,173.53	29.22	21.85	-179.82	594.13	284.91	1,957.10	1,912.35	44.75	43.733	
6,900.00	6,258.47	6,292.95	6,261.28	29.53	22.16	-179.78	595.07	283.88	1,967.19	1,921.86	45.33	43.398	
7,000.00	6,358.27	6,383.27	6,351.59	29.82	22.46	-179.74	595.71	282.34	1,973.49	1,927.57	45.92	42.981	
7,091.75	6,450.00	6,470.94	6,439.25	30.07	22.76	-153.54	596.02	280.77	1,975.77	1,929.29	46.48	42.506	
7,100.00	6,458.25	6,479.08	6,447.38	30.10	22.79	-153.54	596.03	280.64	1,975.81	1,929.28	46.54	42.458	
7,199.35	6,557.60	6,564.00	6,532.28	30.36	23.07	-153.50	596.03	279.17	1,976.60	1,929.54	47.06	42.004	
7,199.99	6,558.23	6,564.49	6,532.78	30.36	23.08	-64.54	596.03	279.16	1,976.61	1,929.55	47.06	42.001	
7,225.00	6,583.23	6,583.96	6,552.24	30.43	23.14	-64.54	595.92	278.76	1,976.67	1,929.50	47.17	41.903	
7,250.00	6,608.15	6,608.99	6,577.26	30.49	23.23	-64.63	595.71	278.20	1,976.25	1,928.92	47.33	41.756	
7,275.00	6,632.93	6,627.27	6,595.54	30.55	23.29	-64.79	595.53	277.78	1,975.30	1,927.87	47.43	41.650	
7,300.00	6,657.50	6,652.80	6,621.06	30.61	23.37	-65.07	595.28	277.21	1,973.80	1,926.21	47.59	41.478	
7,325.00	6,681.80	6,678.06	6,646.32	30.67	23.46	-65.44	595.03	276.66	1,971.75	1,924.00	47.74	41.298	
7,350.00	6,705.76	6,703.00	6,671.25	30.72	23.54	-65.90	594.80	276.14	1,969.16	1,921.26	47.90	41.109	
7,375.00	6,729.31	6,725.48	6,693.72	30.78	23.61	-66.44	594.57	275.68	1,966.07	1,918.03	48.04	40.929	
7,400.00	6,752.39	6,747.43	6,715.67	30.83	23.69	-67.05	594.32	275.27	1,962.50	1,914.34	48.17	40.743	
7,425.00	6,774.94	6,768.88	6,737.11	30.87	23.76	-67.75	594.05	274.89	1,958.49	1,910.19	48.30	40.550	
7,450.00	6,796.89	6,789.76	6,757.99	30.92	23.83	-68.52	593.76	274.54	1,954.06	1,905.63	48.42	40.352	
7,475.00	6,818.19	6,797.99	6,766.21	30.96	23.85	-69.18	593.64	274.41	1,949.27	1,900.83	48.44	40.238	
7,500.00	6,838.77	6,821.16	6,789.38	30.99	23.93	-70.13	593.25	274.00	1,944.12	1,895.53	48.60	40.006	
7,525.00	6,858.58	6,835.06	6,803.27	31.03	23.98	-71.00	592.97	273.71	1,938.72	1,890.05	48.67	39.834	
7,550.00	6,877.57	6,848.45	6,816.66	31.05	24.02	-71.90	592.66	273.40	1,933.08	1,884.33	48.74	39.658	
7,575.00	6,895.68	6,861.31	6,829.51	31.08	24.06	-72.85	592.34	273.07	1,927.21	1,878.39	48.82	39.478	
7,600.00	6,912.86	6,873.59	6,841.78	31.10	24.11	-73.82	592.01	272.72	1,921.16	1,872.27	48.89	39.296	
7,625.00	6,929.07	6,892.99	6,861.16	31.12	24.17	-75.00	591.44	272.13	1,914.97	1,865.94	49.03	39.055	
7,650.00	6,944.26	6,903.42	6,871.58	31.14	24.20	-76.01	591.12	271.80	1,908.61	1,859.51	49.10	38.871	
7,675.00	6,958.39	6,935.50	6,903.64	31.15	24.31	-77.60	590.28	271.01	1,902.05	1,852.68	49.37	38.523	
7,700.00	6,971.42	6,964.43	6,932.56	31.16	24.41	-79.18	589.69	270.55	1,895.30	1,845.68	49.62	38.194	
7,725.00	6,983.32	6,990.22	6,958.34	31.16	24.49	-80.72	589.30	270.35	1,888.44	1,838.59	49.85	37.882	
7,750.00	6,994.05	7,004.51	6,972.63	31.16	24.54	-81.98	589.13	270.29	1,881.56	1,831.58	49.99	37.642	
7,775.00	7,003.58	7,018.07	6,986.19	31.16	24.59	-83.22	588.99	270.26	1,874.73	1,824.61	50.12	37.404	
7,800.00	7,011.89	7,029.80	6,997.92	31.16	24.63	-84.40	588.89	270.25	1,868.00	1,817.76	50.25	37.175	
7,825.00	7,018.96	7,039.70	7,007.83	31.15	24.66	-85.52	588.82	270.26	1,861.42	1,811.05	50.37	36.957	
7,850.00	7,024.76	7,047.76	7,015.88	31.14	24.69	-86.56	588.77	270.27	1,855.02	1,804.54	50.48	36.750	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 376H - OH - OH											Offset Site Error:		0.00 usft
Survey Program:		25-SuperiorQC MWD+IFR1+SAG+FDIR					Rule Assigned:				Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,875.00	7,029.29	7,053.98	7,022.10	31.12	24.71	-87.52	588.74	270.28	1,848.83	1,798.26	50.58	36.554	
7,900.00	7,032.52	7,058.35	7,026.47	31.11	24.72	-88.39	588.72	270.30	1,842.90	1,792.23	50.67	36.371	
7,925.00	7,034.44	7,060.89	7,029.01	31.09	24.73	-89.17	588.71	270.30	1,837.25	1,786.50	50.75	36.201	
7,950.00	7,035.06	7,061.62	7,029.74	31.07	24.73	-89.85	588.71	270.31	1,831.90	1,781.08	50.82	36.044	
7,958.14	7,034.98	7,061.47	7,029.59	31.06	24.73	-90.05	588.71	270.31	1,830.23	1,779.39	50.85	35.996	
8,000.00	7,034.21	7,060.21	7,028.33	31.03	24.73	-90.01	588.71	270.30	1,822.18	1,771.22	50.96	35.757	
8,100.00	7,032.37	7,057.26	7,025.38	30.96	24.72	-89.91	588.72	270.29	1,806.73	1,755.46	51.28	35.235	
8,200.00	7,030.53	7,054.40	7,022.52	30.89	24.71	-89.82	588.74	270.28	1,796.72	1,745.09	51.64	34.795	
8,300.00	7,028.69	7,051.62	7,019.74	30.84	24.70	-89.73	588.75	270.28	1,792.24	1,740.20	52.04	34.440	
8,330.50	7,028.13	7,050.79	7,018.91	30.82	24.70	-89.71	588.75	270.27	1,791.98	1,739.81	52.17	34.347	
8,400.00	7,026.85	7,048.93	7,017.05	30.79	24.69	-89.65	588.76	270.27	1,793.33	1,740.86	52.47	34.178	
8,500.00	7,025.01	7,046.32	7,014.44	30.75	24.68	-89.56	588.78	270.26	1,799.98	1,747.06	52.92	34.011	
8,600.00	7,023.17	7,043.78	7,011.90	30.72	24.67	-89.48	588.79	270.26	1,812.13	1,758.74	53.39	33.942	
8,700.00	7,021.33	7,041.31	7,009.43	30.70	24.66	-89.40	588.81	270.26	1,829.67	1,775.81	53.85	33.974	
8,800.00	7,019.49	7,038.91	7,007.04	30.71	24.66	-89.33	588.82	270.25	1,852.44	1,798.13	54.31	34.106	
8,900.00	7,017.65	7,036.58	7,004.70	30.74	24.65	-89.25	588.84	270.25	1,880.27	1,825.51	54.76	34.336	
9,000.00	7,015.81	7,034.31	7,002.44	30.85	24.64	-89.18	588.86	270.25	1,912.92	1,857.73	55.19	34.663	
9,100.00	7,013.97	7,032.10	7,000.23	31.07	24.63	-89.11	588.87	270.25	1,950.15	1,894.56	55.59	35.083	
9,200.00	7,012.13	7,029.96	6,998.08	31.47	24.63	-89.04	588.89	270.25	1,991.71	1,935.75	55.96	35.591	
9,300.00	7,010.29	7,027.86	6,995.99	31.98	24.62	-88.97	588.91	270.25	2,037.33	1,981.03	56.31	36.184	
9,400.00	7,008.44	7,025.82	6,993.95	32.57	24.61	-88.91	588.92	270.25	2,086.75	2,030.13	56.62	36.855	
9,500.00	7,006.60	7,023.84	6,991.96	33.21	24.61	-88.84	588.94	270.25	2,139.71	2,082.80	56.91	37.601	
9,600.00	7,004.76	7,021.90	6,990.02	33.88	24.60	-88.78	588.96	270.25	2,195.94	2,138.78	57.16	38.416	
9,700.00	7,002.92	7,020.01	6,988.13	34.58	24.59	-88.72	588.97	270.26	2,255.20	2,197.81	57.39	39.294	
9,800.00	7,001.08	7,018.17	6,986.29	35.30	24.59	-88.66	588.99	270.26	2,317.27	2,259.67	57.60	40.232	
9,900.00	6,999.24	7,016.37	6,984.49	36.05	24.58	-88.60	589.01	270.26	2,381.91	2,324.13	57.78	41.224	
10,000.00	6,997.40	7,014.61	6,982.73	36.82	24.57	-88.55	589.02	270.26	2,448.93	2,390.99	57.94	42.266	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 377H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	0.67	60.00	0.70	60.00				
100.00	100.00	99.97	99.97	0.25	0.13	0.72	60.02	0.75	60.02	59.65	0.38	159.004	
200.00	200.00	199.91	199.90	0.61	0.46	1.27	60.44	1.34	60.45	59.38	1.07	56.402	
300.00	300.00	299.66	299.65	0.97	0.81	1.58	60.90	1.68	60.93	59.15	1.78	34.232	
400.00	400.00	399.46	399.45	1.33	1.16	1.39	61.82	1.50	61.84	59.35	2.49	24.837	
500.00	500.00	499.14	499.12	1.68	1.52	1.31	63.06	1.45	63.08	59.88	3.20	19.692	
600.00	600.00	599.07	599.04	2.04	1.88	1.77	64.51	1.99	64.55	60.63	3.92	16.471	
700.00	699.97	699.05	699.00	2.40	2.23	-25.24	65.98	1.99	64.03	59.40	4.63	13.819	
800.00	799.75	798.96	798.90	2.76	2.59	-28.65	67.56	1.30	59.79	54.44	5.35	11.180	
900.00	899.14	898.86	898.79	3.12	2.94	-35.63	68.47	0.33	51.54	45.48	6.06	8.505	
1,000.00	997.97	997.75	997.68	3.48	3.29	-49.61	68.80	-0.65	40.81	34.05	6.76	6.034	
1,100.00	1,096.04	1,095.75	1,095.67	3.84	3.63	-77.52	69.30	-1.61	32.79	25.33	7.46	4.395	
1,125.06	1,120.48	1,120.18	1,120.10	3.93	3.72	-87.05	69.43	-1.86	32.31	24.68	7.64	4.232	CC, ES, SF
1,200.00	1,193.17	1,192.84	1,192.75	4.20	3.97	-115.68	69.79	-2.65	37.08	28.92	8.16	4.544	
1,300.00	1,289.17	1,288.77	1,288.68	4.56	4.31	-141.02	70.27	-3.77	56.35	47.49	8.86	6.363	
1,400.00	1,383.85	1,383.54	1,383.44	4.94	4.65	-153.77	70.69	-4.88	84.72	75.18	9.54	8.879	
1,500.00	1,477.05	1,476.49	1,476.39	5.32	4.98	-160.67	71.17	-5.79	118.89	108.68	10.21	11.642	
1,600.00	1,568.57	1,566.43	1,566.31	5.71	5.28	-165.26	70.36	-6.15	158.56	147.70	10.85	14.610	
1,700.00	1,658.25	1,654.15	1,654.00	6.11	5.58	-168.74	67.92	-5.66	203.56	192.09	11.47	17.744	
1,783.60	1,731.68	1,726.67	1,726.46	6.45	5.82	-171.06	65.20	-4.47	244.60	232.62	11.99	20.409	
1,800.00	1,745.94	1,740.87	1,740.65	6.52	5.87	-171.50	64.63	-4.16	252.93	240.84	12.09	20.921	
1,900.00	1,832.90	1,826.64	1,826.31	6.94	6.16	-173.71	61.13	-1.87	303.75	291.07	12.68	23.950	
2,000.00	1,919.86	1,909.42	1,908.96	7.37	6.44	-175.32	57.21	0.50	355.21	341.95	13.26	26.789	
2,100.00	2,006.82	1,992.00	1,991.35	7.80	6.72	-176.65	52.26	3.10	407.66	393.82	13.84	29.456	
2,200.00	2,093.78	2,065.93	2,065.01	8.24	6.98	-177.71	46.46	5.65	461.47	447.11	14.36	32.143	
2,300.00	2,180.73	2,140.34	2,139.00	8.69	7.23	-178.71	39.02	8.40	516.94	502.07	14.88	34.747	
2,400.00	2,267.69	2,213.28	2,211.33	9.14	7.48	-179.64	30.16	11.50	573.91	558.52	15.39	37.300	
2,500.00	2,354.65	2,284.65	2,281.86	9.59	7.73	179.45	19.92	15.22	632.29	616.40	15.88	39.805	
2,600.00	2,441.61	2,355.21	2,351.29	10.04	7.98	178.53	8.25	19.80	691.97	675.59	16.38	42.252	
2,700.00	2,528.57	2,427.01	2,421.64	10.50	8.23	177.60	-4.98	25.38	752.75	735.87	16.88	44.585	
2,800.00	2,615.53	2,500.60	2,493.51	10.96	8.49	176.68	-19.44	31.71	814.31	796.90	17.41	46.774	
2,900.00	2,702.48	2,576.40	2,567.48	11.42	8.76	175.85	-34.68	38.36	876.28	858.32	17.96	48.794	
3,000.00	2,789.44	2,652.99	2,642.19	11.88	9.04	175.12	-50.15	45.00	938.46	919.94	18.52	50.676	
3,100.00	2,876.40	2,730.22	2,717.54	12.35	9.32	174.48	-65.77	51.57	1,000.80	981.71	19.09	52.432	
3,200.00	2,963.36	2,806.79	2,792.24	12.81	9.60	173.92	-81.30	57.95	1,063.28	1,043.63	19.65	54.101	
3,300.00	3,050.32	2,892.91	2,876.41	13.28	9.91	173.40	-98.25	64.77	1,125.48	1,105.18	20.30	55.432	
3,400.00	3,137.27	2,968.39	2,950.22	13.74	10.19	173.01	-112.93	70.54	1,187.63	1,166.76	20.87	56.919	
3,500.00	3,224.23	3,044.61	3,024.74	14.21	10.47	172.66	-127.84	76.28	1,249.92	1,228.49	21.44	58.312	
3,600.00	3,311.19	3,120.59	3,099.04	14.68	10.75	172.35	-142.74	81.75	1,312.37	1,290.37	22.00	59.641	
3,700.00	3,398.15	3,197.42	3,174.20	15.15	11.04	172.08	-157.83	87.05	1,374.93	1,352.34	22.58	60.883	
3,800.00	3,485.11	3,274.11	3,249.20	15.62	11.32	171.83	-172.94	92.33	1,437.57	1,414.41	23.16	62.066	
3,900.00	3,572.06	3,354.49	3,327.83	16.09	11.62	171.61	-188.73	97.69	1,500.22	1,476.45	23.77	63.107	
4,000.00	3,659.02	3,431.50	3,403.19	16.57	11.91	171.41	-203.72	102.72	1,562.79	1,538.44	24.36	64.162	
4,100.00	3,745.98	3,512.82	3,482.76	17.04	12.22	171.22	-219.63	108.09	1,625.43	1,600.45	24.98	65.075	
4,200.00	3,832.94	3,652.17	3,619.53	17.51	12.74	170.90	-244.05	118.80	1,686.13	1,660.08	26.06	64.710	
4,300.00	3,919.90	3,737.57	3,703.56	17.99	13.06	170.72	-257.45	126.02	1,745.37	1,718.66	26.71	65.350	
4,400.00	4,006.85	3,805.61	3,770.53	18.46	13.32	170.60	-268.26	131.25	1,804.98	1,777.75	27.23	66.292	
4,500.00	4,093.81	3,869.01	3,832.93	18.93	13.55	170.52	-278.66	135.44	1,865.25	1,837.54	27.71	67.310	
4,600.00	4,180.77	3,958.68	3,921.23	19.41	13.89	170.43	-293.42	140.64	1,925.77	1,897.37	28.40	67.814	
4,700.00	4,267.73	4,048.63	4,009.92	19.88	14.23	170.37	-307.56	145.69	1,985.75	1,956.67	29.09	68.273	
4,800.00	4,354.69	4,118.86	4,079.15	20.36	14.49	170.31	-318.56	149.78	2,045.66	2,016.04	29.62	69.053	
4,900.00	4,441.65	4,190.67	4,149.77	20.84	14.76	170.23	-330.61	154.85	2,106.11	2,075.93	30.18	69.792	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 377H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 25-SuperiorQC MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	4,528.60	4,281.92	4,239.49	21.31	15.11	170.11	-345.81	161.59	2,166.40	2,135.52	30.88	70.158	
5,100.00	4,615.56	4,376.71	4,332.80	21.79	15.47	170.01	-361.00	168.54	2,226.22	2,194.61	31.61	70.435	
5,200.00	4,702.52	4,446.99	4,402.04	22.26	15.73	169.94	-371.81	173.76	2,285.58	2,253.43	32.15	71.089	
5,300.00	4,789.48	4,510.66	4,464.68	22.74	15.97	169.86	-382.06	178.75	2,345.43	2,312.78	32.65	71.844	
5,400.00	4,876.44	4,568.85	4,521.72	23.22	16.19	169.78	-392.44	183.69	2,406.34	2,373.24	33.10	72.699	
5,500.00	4,963.39	4,643.20	4,594.53	23.69	16.48	169.67	-406.03	190.17	2,467.58	2,433.90	33.68	73.269	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - Palmillo 29-30 378H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 26-SuperiorQC MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	15.70	0.00	0.00	177.84	-2,118.40	80.00	2,119.97					
100.00	100.00	80.26	95.96	0.25	0.19	177.83	-2,118.45	80.11	2,119.97	2,119.52	0.44	4,770.128		
171.03	171.03	155.33	171.03	0.51	0.46	177.83	-2,118.39	80.28	2,119.91	2,118.95	0.96	2,203.184	CC	
200.00	200.00	177.10	192.80	0.61	0.53	177.83	-2,118.45	80.38	2,119.99	2,118.85	1.14	1,855.360		
300.00	300.00	283.91	299.60	0.97	0.91	177.82	-2,118.61	80.54	2,120.14	2,118.27	1.87	1,131.630		
400.00	400.00	371.58	387.27	1.33	1.21	177.83	-2,118.97	80.29	2,120.53	2,117.99	2.54	836.441		
500.00	500.00	469.14	484.82	1.68	1.55	177.86	-2,119.73	79.36	2,121.27	2,118.04	3.23	655.928		
600.00	600.00	571.51	587.19	2.04	1.91	177.86	-2,120.42	79.21	2,121.94	2,117.98	3.96	536.512	ES	
700.00	699.97	672.74	688.42	2.40	2.27	151.71	-2,120.98	79.25	2,124.41	2,119.74	4.67	454.589		
800.00	799.75	771.24	786.92	2.76	2.62	151.72	-2,121.54	79.20	2,130.74	2,125.35	5.38	395.696		
900.00	899.14	867.58	883.26	3.12	2.97	151.73	-2,122.18	79.17	2,141.00	2,134.91	6.09	351.574		
1,000.00	997.97	975.33	990.99	3.48	3.35	151.74	-2,122.83	80.39	2,155.08	2,148.25	6.83	315.502		
1,100.00	1,096.04	1,086.43	1,101.97	3.84	3.74	151.67	-2,122.68	85.62	2,172.33	2,164.75	7.58	286.738		
1,200.00	1,193.17	1,187.38	1,202.77	4.20	4.09	151.58	-2,122.16	91.05	2,193.01	2,184.73	8.29	264.672		
1,300.00	1,289.17	1,263.36	1,278.62	4.56	4.35	151.42	-2,122.05	95.58	2,217.83	2,208.92	8.91	248.936		
1,400.00	1,383.85	1,356.87	1,371.86	4.94	4.68	151.26	-2,122.50	102.59	2,246.98	2,237.39	9.59	234.232		
1,500.00	1,477.05	1,470.95	1,485.42	5.32	5.09	151.09	-2,122.47	113.41	2,279.38	2,269.03	10.35	220.234		
1,600.00	1,568.57	1,570.52	1,584.36	5.71	5.44	150.86	-2,121.78	124.59	2,314.77	2,303.72	11.05	209.405		
1,700.00	1,658.25	1,654.71	1,667.92	6.11	5.74	150.55	-2,121.22	134.83	2,353.77	2,342.07	11.70	201.161		
1,783.60	1,731.68	1,729.51	1,742.07	6.45	6.00	150.28	-2,120.84	144.64	2,389.20	2,376.94	12.26	194.916		
1,800.00	1,745.94	1,744.23	1,756.67	6.52	6.06	150.33	-2,120.77	146.60	2,396.39	2,384.02	12.37	193.730		
1,900.00	1,832.90	1,839.14	1,850.72	6.94	6.40	150.61	-2,120.20	159.28	2,440.16	2,427.11	13.05	187.051		
2,000.00	1,919.86	1,935.84	1,946.52	7.37	6.74	150.87	-2,119.35	172.42	2,483.72	2,469.98	13.73	180.849	SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Camacho 25 26 Offsets - STATE E-4202 1 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 500-UNKNOWN													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	20.00	0.00	0.00	-30.32	2,092.82	-1,224.07	2,424.59				
100.00	100.00	80.00	100.00	0.25	4.00	-30.32	2,092.82	-1,224.07	2,424.51	2,420.25	4.25	569.938	
200.00	200.00	180.00	200.00	0.61	9.01	-30.32	2,092.82	-1,224.07	2,424.51	2,414.89	9.62	252.132	
300.00	300.00	280.00	300.00	0.97	14.01	-30.32	2,092.82	-1,224.07	2,424.51	2,409.53	14.98	161.871	
400.00	400.00	380.00	400.00	1.33	19.01	-30.32	2,092.82	-1,224.07	2,424.51	2,404.17	20.34	119.198	
500.00	500.00	480.00	500.00	1.68	24.02	-30.32	2,092.82	-1,224.07	2,424.51	2,398.81	25.70	94.331	
600.00	600.00	580.00	600.00	2.04	28.26	-30.32	2,092.82	-1,224.07	2,424.51	2,394.20	30.31	80.001	
700.00	699.97	679.97	699.97	2.40	32.32	-56.54	2,092.82	-1,224.07	2,423.30	2,388.59	34.72	69.800	
800.00	799.75	779.75	799.75	2.76	36.36	-56.75	2,092.82	-1,224.07	2,419.70	2,380.58	39.12	61.849	
900.00	899.14	879.14	899.14	3.12	40.40	-57.09	2,092.82	-1,224.07	2,413.73	2,370.22	43.51	55.472	
1,000.00	997.97	977.97	997.97	3.48	44.40	-57.56	2,092.82	-1,224.07	2,405.45	2,357.57	47.88	50.239	
1,100.00	1,096.04	1,076.04	1,096.04	3.84	48.35	-58.18	2,092.82	-1,224.07	2,394.93	2,342.74	52.19	45.887	
1,200.00	1,193.17	1,173.17	1,193.17	4.20	52.26	-58.93	2,092.82	-1,224.07	2,382.27	2,325.81	56.46	42.194	
1,300.00	1,289.17	1,269.17	1,289.17	4.56	56.12	-59.81	2,092.82	-1,224.07	2,367.57	2,306.89	60.69	39.014	
1,400.00	1,383.85	1,363.85	1,383.85	4.94	59.93	-60.82	2,092.82	-1,224.07	2,351.00	2,286.13	64.86	36.246	
1,500.00	1,477.05	1,457.05	1,477.05	5.32	63.68	-61.97	2,092.82	-1,224.07	2,332.69	2,263.71	68.99	33.814	
1,600.00	1,568.57	1,548.57	1,568.57	5.71	67.35	-63.24	2,092.82	-1,224.07	2,312.85	2,239.81	73.04	31.665	
1,700.00	1,658.25	1,638.25	1,658.25	6.11	70.95	-64.64	2,092.82	-1,224.07	2,291.68	2,214.65	77.03	29.751	
1,783.60	1,731.68	1,711.68	1,731.68	6.45	73.90	-65.89	2,092.82	-1,224.07	2,273.12	2,192.81	80.31	28.305	
1,800.00	1,745.94	1,725.94	1,745.94	6.52	74.47	-66.06	2,092.82	-1,224.07	2,269.43	2,188.48	80.95	28.036	
1,900.00	1,832.90	1,812.90	1,832.90	6.94	77.96	-67.08	2,092.82	-1,224.07	2,247.40	2,162.56	84.84	26.490	
2,000.00	1,919.86	1,899.86	1,919.86	7.37	81.44	-68.12	2,092.82	-1,224.07	2,226.25	2,137.51	88.75	25.086	
2,100.00	2,006.82	1,986.82	2,006.82	7.80	84.93	-69.18	2,092.82	-1,224.07	2,206.01	2,113.35	92.66	23.808	
2,200.00	2,093.78	2,073.78	2,093.78	8.24	88.60	-70.25	2,092.82	-1,224.07	2,186.69	2,089.93	96.76	22.599	
2,300.00	2,180.73	2,160.73	2,180.73	8.69	92.30	-71.33	2,092.82	-1,224.07	2,168.32	2,067.42	100.90	21.489	
2,400.00	2,267.69	2,247.69	2,267.69	9.14	96.00	-72.43	2,092.82	-1,224.07	2,150.94	2,045.89	105.05	20.475	
2,500.00	2,354.65	2,334.65	2,354.65	9.59	99.70	-73.55	2,092.82	-1,224.07	2,134.55	2,025.34	109.20	19.547	
2,600.00	2,441.61	2,421.61	2,441.61	10.04	103.40	-74.67	2,092.82	-1,224.07	2,119.18	2,005.82	113.36	18.694	
2,700.00	2,528.57	2,508.57	2,528.57	10.50	107.10	-75.81	2,092.82	-1,224.07	2,104.87	1,987.34	117.52	17.910	
2,800.00	2,615.53	2,595.53	2,615.53	10.96	110.80	-76.96	2,092.82	-1,224.07	2,091.62	1,969.93	121.69	17.188	
2,900.00	2,702.48	2,682.48	2,702.48	11.42	113.29	-77.74	2,092.82	-1,224.07	2,079.65	1,955.01	124.64	16.685	
3,000.00	2,789.44	2,769.44	2,789.44	11.88	113.29	-77.74	2,092.82	-1,224.07	2,071.63	1,946.67	124.96	16.578	
3,100.00	2,876.40	2,856.40	2,876.40	12.35	113.29	-77.74	2,092.82	-1,224.07	2,068.41	1,943.35	125.05	16.540 SF	
3,116.60	2,890.83	2,870.83	2,890.83	12.42	113.29	-77.74	2,092.82	-1,224.07	2,068.34	1,943.29	125.05	16.541 CC, ES	
3,200.00	2,963.36	2,943.36	2,963.36	12.81	113.29	-77.74	2,092.82	-1,224.07	2,070.02	1,945.09	124.92	16.570	
3,300.00	3,050.32	3,030.32	3,050.32	13.28	113.29	-77.74	2,092.82	-1,224.07	2,076.45	1,951.88	124.57	16.669	
3,400.00	3,137.27	3,117.27	3,137.27	13.74	113.29	-77.74	2,092.82	-1,224.07	2,087.66	1,963.65	124.01	16.835	
3,500.00	3,224.23	3,204.23	3,224.23	14.21	113.29	-77.74	2,092.82	-1,224.07	2,103.56	1,980.32	123.25	17.068	
3,600.00	3,311.19	3,291.19	3,311.19	14.68	113.29	-77.74	2,092.82	-1,224.07	2,124.07	2,001.77	122.30	17.368	
3,700.00	3,398.15	3,378.15	3,398.15	15.15	113.29	-77.74	2,092.82	-1,224.07	2,149.03	2,027.84	121.19	17.733	
3,800.00	3,485.11	3,465.11	3,485.11	15.62	113.29	-77.74	2,092.82	-1,224.07	2,178.30	2,058.37	119.93	18.163	
3,900.00	3,572.06	3,552.06	3,572.06	16.09	113.29	-77.74	2,092.82	-1,224.07	2,211.71	2,093.16	118.55	18.656	
4,000.00	3,659.02	3,639.02	3,659.02	16.57	113.29	-77.74	2,092.82	-1,224.07	2,249.07	2,132.00	117.08	19.210	
4,100.00	3,745.98	3,725.98	3,745.98	17.04	113.29	-77.74	2,092.82	-1,224.07	2,290.20	2,174.67	115.53	19.824	
4,200.00	3,832.94	3,812.94	3,832.94	17.51	113.29	-77.74	2,092.82	-1,224.07	2,334.88	2,220.96	113.92	20.496	
4,300.00	3,919.90	3,899.90	3,919.90	17.99	113.29	-77.74	2,092.82	-1,224.07	2,382.93	2,270.65	112.28	21.223	
4,400.00	4,006.85	3,986.85	4,006.85	18.46	113.29	-77.74	2,092.82	-1,224.07	2,434.14	2,323.51	110.62	22.004	
4,500.00	4,093.81	4,073.81	4,093.81	18.93	113.29	-77.74	2,092.82	-1,224.07	2,488.31	2,379.35	108.96	22.836	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

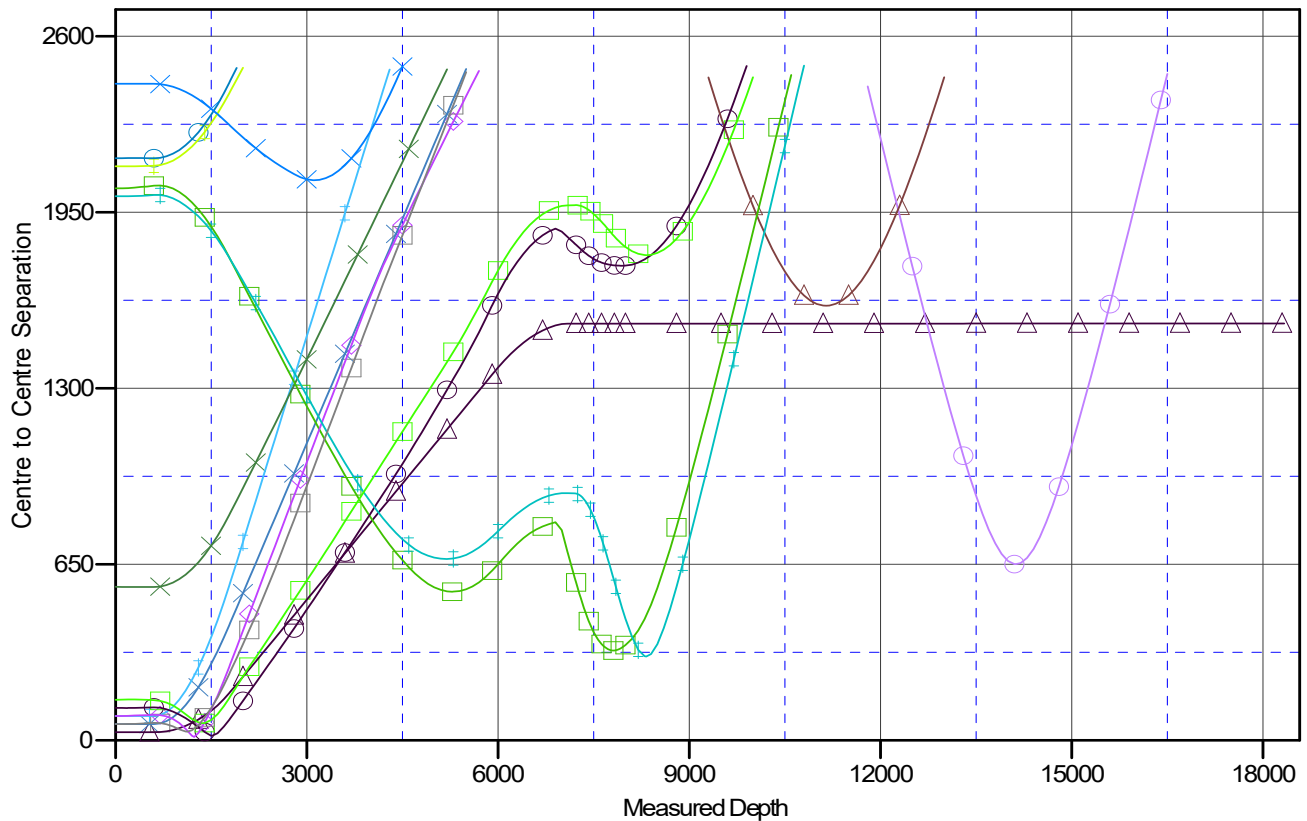
Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB=30ft @ 3500.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Camacho 25-26 State Com 201H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.06°

Ladder Plot



LEGEND

Camacho 25-26 State Com 202H, OH, Plan #1 V0	GUARDIAN 25 STATE COM 001, OH, OH V0	Palmbk29-30 375H, OH, OH V0
Camacho 25-26 State Com 204H, OH, Plan #1 V0	Palmbk29-30 271H, OH, OH V0	Palmbk29-30 376H, OH, OH V0
Camacho 25-26 State Com 203H, OH, Plan #1 V0	Palmbk29-30 272H, OH, OH V0	Palmbk29-30 377H, OH, OH V0
ANGELL RANCH 26 R001, OH, OH V0	Palmbk29-30 273H, OH, OH V0	Palmbk29-30 378H, OH, OH V0
EDDYGL STATE COM 001, OH, OH V0	Palmbk29-30 274H, OH, OH V0	STATEE42021, OH, OH V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

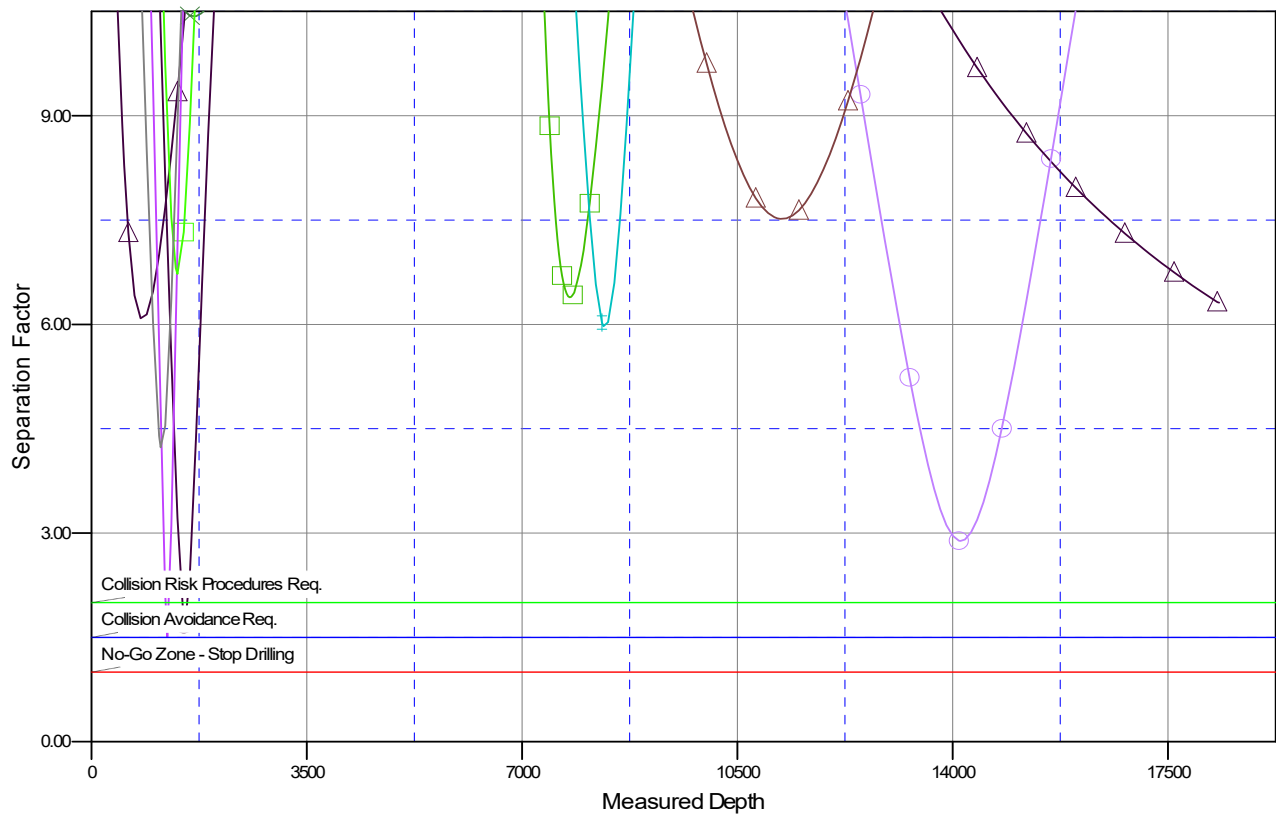
Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 201H
Project:	Eddy Co, NM (NAD83 NM E)	TVD Reference:	RKB=30ft @ 3500.00usft
Reference Site:	Camacho 25 26 (Middle)	MD Reference:	RKB=30ft @ 3500.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Camacho 25-26 State Com 201H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	Fhartmann
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB=30ft @ 3500.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Camacho 25-26 State Com 201H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.06°

Separation Factor Plot



LEGEND

Camacho 25-26 State Com 202H, OH, Plan #1 V0	GUARDIAN 25 STATECOM001, OH, OH V0	Palink29-30 375H, OH, OH V0
Camacho 25-26 State Com 204H, OH, Plan #1 V0	Palink29-30 271H, OH, OH V0	Palink29-30 376H, OH, OH V0
Camacho 25-26 State Com 203H, OH, Plan #1 V0	Palink29-30 272H, OH, OH V0	Palink29-30 377H, OH, OH V0
ANGELL RANCH 25/001, OH, OH V0	Palink29-30 273H, OH, OH V0	Palink29-30 378H, OH, OH V0
EDDYGL STATECOM001, OH, OH V0	Palink29-30 274H, OH, OH V0	STATEE42021, OH, OH V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

HYDROGEN SULFIDE (H₂S) DRILLING OPERATIONS PLAN

Hydrogen Sulfide Training:

All regularly assigned personnel, contracted or employed by Apache Corporation will receive training from qualified instructor(s) in the following areas prior to commencing drilling possible hydrogen sulfide bearing formations in this well:

- The hazards and characteristics of hydrogen sulfide (H₂S)
- The proper use and maintenance of personal protective equipment and life support systems.
- The proper use of H₂S detectors, alarms, warning systems, briefing area, evacuation procedures & prevailing winds.
- The proper techniques for first aid and rescue procedures.

Supervisory personnel will be trained in the following areas:

- The effects of H₂S on metal components. If high tensile tubulars are to be utilized, personnel will be trained in their special maintenance requirements.
- Corrective action & shut-in procedures when drilling or reworking a well & blowout prevention / well control procedures.
- The contents and requirements of the H₂S Drilling Operations Plan

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500') and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received proper training.

H₂S SAFETY EQUIPMENT AND SYSTEMS:

Well Control Equipment that will be available & installed if H₂S is encountered:

- Flare Line with electronic igniter or continuous pilot.
- Choke manifold with a minimum of one remote choke.
- Blind rams & pipe rams to accommodate all pipe sizes with properly sized closing unit.
- Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head & flare gun with flares

Protective Equipment for Essential Personnel:

- Mark II Survive-air 30 minute units located in dog house & at briefing areas, as indicated on wellsite diagram.

H₂S Detection and Monitoring Equipment:

- Two portable H₂S monitors positioned on location for best coverage & response. These units have warning lights & audible sirens when H₂S levels of 20 ppm are reached.
- One portable H₂S monitor positioned near flare line.

H₂S Visual Warning Systems:

- Wind direction indicators are shown on wellsite diagram.
- Caution / Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

Mud Program:

- The Mud Program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weights, safe drilling practices & the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.
- A mud-gas separator and H₂S gas buster will be utilized as needed.

Metallurgy:

- All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold & lines, & valves will be suitable for H₂S service.
- All elastomers used for packing & seals shall be H₂S trim.

Communication:

- Cellular telephone and 2-way radio communications in company vehicles, rig floor and mud logging trailer.

HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operators and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the :
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Apache Corporation personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Apache's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

WELL CONTROL EMERGENCY RESPONSE PLAN

I. GENERAL PHILOSOPHY

Our objective is to ensure that during an emergency, a predetermined procedure is followed so that prompt decisions can be made based on accurate information.

The best way to handle an emergency is with an experienced organization set up for the sole purpose of solving the problem. The *Well Control Emergency Response Team* was organized to handle dangerous & expensive well control problems. The *Team* is structured such that each individual can contribute the most from his area of expertise. Key decision-makers are determined prior to an emergency to avoid confusion about who is in charge.

If the well is flowing uncontrolled at the surface or subsurface, *The Emergency Response Team* will be mobilized. The *Team* is customized for the people currently on the Apache staff. Staff changes may require a change in the plan.

II. EMERGENCY PROCEDURE ON DRILLING OR COMPLETION OPERATIONS

- A. In the event of an emergency the *Drilling Foreman* or *Tool-Pusher* will immediately contact only one of the following starting with the first name listed:

Name	Office	Mobile	Home
David LeBlanc – Drlg Superintendent		972-439-4872	
Jonathan Rebenack – Drilling Engineer	713-296-6061	281-782-5493	
Roy DeNapoli – Drilling Manager	713-296-6739	832-275-8531	
Ted Ward EH&S Coordinator	432-234-0600	432-818-1606	

***This one phone call will free the Drilling Foreman to devote his full time to securing the safety of personnel & equipment. This call will initiate the process to mobilize the Well Control Emergency Response Team. Apache maintains an Emergency Telephone Conference Room in the Houston office. This room is available for us by the Permian Region. The room has 50 separate telephone lines.*

- B. The Apache employee contacted by the Drilling Foreman will begin contacting the rest of the *Team*. If **DAVID LE BLANC** is out of contact, **JONATHAN REVENACK** will be notified.
- C. If a member of the *Emergency Response Team* is away from the job, he must be available for call back. Telephone numbers should be left with secretaries or a key decision-maker.
- D. Apache's reporting procedure for spills or releases of oil or hazardous materials will be implemented when spills or releases have occurred or are probable.

EMERGENCY RESPONSE NUMBERS:

SHERIFF DEPARTMENT	
Eddy County	575-887-7551
Lea County	575-396-3611
FIRE DEPARTMENT	
	911
Artesia	575-746-5050
Carlsbad	575-885-2111
Eunice	575-394-2111
Hobbs	575-397-9308
Jal	575-395-2221
Lovington	575-396-2359
HOSPITALS	
	911
Artesia Medical Emergency	575-746-5050
Carlsbad Medical Emergency	575-885-2111
Eunice Medical Emergency	575-394-2112
Hobbs Medical Emergency	575-397-9308
Jal Medical Emergency	575-395-2221
Lovington Medical Emergency	575-396-2359
AGENT NOTIFICATIONS	
Bureau of Land Management	575-393-3612
New Mexico Oil Conservation Division	575-393-6161

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: APACHE CORPORATION **OGRID:** 873 **Date:** 03 / 20 / 2024

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
Camacho 25 26 State Com 201H		Sec 25 T19S R27E	2542' FSL 750' FEL	4000 bbl/d	8 mmcf/d	6500 bbl/d
Camacho 25 26 State Com 202H		Sec 25 T19S R27E	2512' FSL 750' FEL	4000 bbl/d	8 mmcf/d	6500 bbl/d
Camacho 25 26 State Com 203H		Sec 25 T19S R27E	2482' FSL 750' FEL	4000 bbl/d	8 mmcf/d	6500 bbl/d
Camacho 25 26 State Com 204H		Sec 25 T19S R27E	2452' FSL 750' FEL	4000 bbl/d	8 mmcf/d	6500 bbl/d

IV. Central Delivery Point Name: Camacho 25 26 State CDP [See 19.15.27.9(D)(1) NMAC]

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
Camacho 25 26 State Com 201H		8/10/2024	9/30/2024	Not yet scheduled	Not yet scheduled	Not yet scheduled
Camacho 25 26 State Com 202H		8/11/2024	10/17/2024	Not yet scheduled	Not yet scheduled	Not yet scheduled
Camacho 25 26 State Com 203H		8/12/2024	11/3/2024	Not yet scheduled	Not yet scheduled	Not yet scheduled
Camacho 25 26 State Com 204H		8/13/2024	11/20/2024	Not yet scheduled	Not yet scheduled	Not yet scheduled

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

VII. Operational Practices: ~~XX~~ 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: ~~XX~~ 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:

XXOperator 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:	<i>Sorina L Flores</i>
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Date:	
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OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

VI. SEPARATION EQUIPMENT

(Complete description of how Apache will size separation equipment to optimize gas capture)

Apache Corporation production tank batteries will include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool in conjunction with the total number of wells planned to/or existing within the facility. If determined to be undersized or needed, separation equipment will be upgraded prior to well(s) being drilled or completed. The separation equipment will be designed and built according to relevant industry specifications, ie API specifications 12J and ASME Sec VIII Div 1. Other recognized industry publications such as Gas Processors Suppliers Association will be referenced when designing separation equipment to optimize gas capture.

VII. OPERATIONAL PRACTICES

(Complete description of actions Apache will take to comply with the requirements of Subsection A-F of 19.15.27.8 NMAC)

(A) Venting & flaring of natural gas

- Apache acknowledges venting or flaring of natural gas during drilling, completion, or production operations constitutes as defined in 19.15.2 NMAC is prohibited. Apache will maximize recovery of natural gas by minimizing waste of natural gas through venting and flaring. During drilling, completion and production operations, Apache will vent, or flare natural gas only as authorized in subsections B, C and D of 19.15.27.8 NMAC. Apache shall flare rather than vent natural gas except when flaring technically infeasible or would pose a risk to safe operations or personnel safety, and venting is a safer alternative than flaring.

(B) Venting & flaring during drilling operations

- Apache shall capture or combust natural gas, if technically feasible, using best industry practices and control technologies
- A properly sized flare stack will be located at a minimum of 100 feet from the nearest surface hole location unless otherwise approved by the division.
- In the event of an emergency or malfunction, Apache may vent natural gas to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment. Apache shall report natural gas vented or flared during an emergency or malfunction to the NMOCD division pursuant Paragraph (1) of Subsection G of 19.15.27.8 NMAC.

(C) Venting & flaring during completions and recompletion

- During initial flowback, Apache shall route flowback fluids into a completion or storage tank and, if technically feasible under the applicable well conditions, flare rather than vent and commence operations of a separator as soon as it is technically feasible for a separator to function.
- During separation flowback, Apache shall capture and route natural gas from separation equipment:
 - ◆ To a gas flowline or collection system, reinject into the well, or use on-site as a fuel source or other purpose that a purchased fuel or raw material would serve; or
 - ◆ To flare if routing natural gas to a gas flowline or collecting system, reinjecting it into the well, or using it on-site as fuel source or other purpose that a purchased fuel or raw material would serve would pose a risk to safe operation or personnel safety.
- If natural gas does not meet gathering pipeline quality specifications, Apache may flare natural gas for 60 days or until the natural gas meets pipeline quality specifications, whichever is sooner, provided:
 - ◆ A properly sized flare stack is equipped with an automatic igniter or continuous pilot
 - ◆ Apache analyzes natural gas samples twice per week
 - ◆ Apache routes natural gas into a gathering pipeline as soon as pipeline specifications are met
 - ◆ Apache provides pipeline specifications and natural gas analyses to NMOCD division upon request

(D) Venting & flaring during production operations

- Apache shall not vent or flare natural gas except:
 - ◆ During an emergency or malfunction
 - ◆ To unload or clean up liquid holdup in a well to atmospheric pressure, provided:
 - Apache does not vent after well achieves stabilized rate and pressure
 - For liquids unloading by manual purging, Apache remains present on-site until the end of unloading or posts at the well site, contact information of personnel conducting liquids unloading operations in close proximity (<30 minutes' drive time) of well being unloaded until end of unloading, takes all

- reasonable actions to achieve stabilized rate and pressure at earliest practical time and takes reasonable actions to minimize venting to maximum extent practicable
- Apache will optimize system to minimize venting of natural gas for any well equipped with a plunger lift system or automated control system
- During downhole maintenance, best management practices will be used to the extent that it does not pose a risk to safe operations and personnel safety.
- ◆ During first 12 months of production from an exploratory well, or as extended by the division for good cause shown, provided:
 - Apache proposes and the division approves well as exploratory
 - Apache is in compliance with its' statewide gas capture requirements
 - Apache submits an updated C-129 form to the division, including a NGMP and timeline for connecting well to a natural gas gathering system or otherwise approved by the division
- ◆ During the following activities unless prohibited
 - Gauging or sampling a storage tank or other low pressure production vessel
 - Loading out liquids from a storage tank or other low pressure production vessel to a transport vehicle
 - Repair and maintenance, including blowing down and depressurizing production equipment to perform repair and maintenance
 - Normal operation of gas activated pneumatic controller or pump
 - Normal operation of storage tank or other low pressure production vessel, but not including venting from a thief hatch that is not properly closed or maintained on an established schedule
 - Normal operations of dehydration units and amine treatment units
 - Normal operations of compressors, compressor engines, and turbines
 - Normal operations of valves, flanges and connectors that is not the result of inadequate equipment design or maintenance
 - Bradenhead, packer leakage test or production test lasting less than 24 hours unless the division requires or approves a longer test period
 - When natural gas does not meet gathering pipeline specifications
 - Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities from pipeline or equipment

(E) Performance standards

- All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste
- Permanent storage tanks associated with production operations that is routed to a flare or control device installed after May 25, 2021, shall equip storage tank with an automatic gauging system that reduces venting of natural gas
- Apache will install a flare properly sized and designed to ensure proper combustion efficiency
 - ◆ Flare stack installed or replaced after May 25, 2021, shall be equipped with an automatic ignitor or continuous pilot
 - ◆ Flare stack installed before May 25, 2021, shall be retrofitted with an automatic ignitor, continuous pilot or technology that alerts operator that flare may have malfunctioned no later than 18 months after May 25, 2021
 - ◆ Flare stack located at well or facility, with an average daily production of equal to or less than 60 mcf of natural gas shall be equipped with an automatic ignitor or continuous pilot if flare stack is replaced after May 25, 2021
- Flare stack constructed after May 25, 2021, shall be securely anchored, and located at least 100 feet from well and storage tanks unless otherwise approved by the division
- At any point in the life of the well (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly, during first year of production and on well or facility with average daily production greater than 60,000 cubic feet of natural gas, to confirm all production components are operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.
- Apache will make and keep records of AVO inspections available to NMOCD for at least 5 years
- Apache may use a remote or automated monitoring technology to detect leaks and release in lieu of AVO inspections with prior NMOCD approval
- Facilities will be designed to minimize waste
- Apache will minimize waste and shall resolve emergencies as quickly and safely as feasible

(F) Measurement or estimation of vented and flared natural gas

- Apache shall measure or estimate volume of natural gas it vents, flares, or beneficially uses during drilling, completion, and production operations regardless of the reason or authorization for such venting or flaring
- Measurement equipment will be installed to measure volume of natural gas flared from existing process piping or flowline piped from equipment associated with a well or facility associated with approved application for permit to drill that has an average daily production greater than 60 mcf of natural gas
- Measuring equipment shall conform to an industry standard
- Measuring equipment shall not be designed or equipped with a manifold that allows diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment
- Apache may estimate volume of vented or flared natural gas using methodology that can be independently verified if metering is not practicable due to low flow rate or pressure
- Apache will estimate volume of vented and flared natural gas based on result of an annual GOR test for that well reported on form C-116 to allow division to independently verify volume and rate of flared natural gas for a well that does not require measuring equipment
- Apache shall install measuring equipment whenever the division determines metering is practicable or the existing measuring equipment or GOR test is not sufficient to measure volume of vented and flared natural gas

VIII. BEST MANAGEMENT PRACTICES

(Complete description of Apache's best management practices to minimize venting during active and planned maintenance)

- Apache has a flare stack designed to handle sufficient volume to ensure proper combustion efficiency. Flare stacks are securely anchored at least 100 feet from wells and storage tanks and are equipped with continuous pilots.
- Apache will not produce oil or gas but will maintain adequate well control through completion operations
- Apache will not flow well during initial production until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational
- Apache will equip storage tanks with automatic gauging system to reduce venting of natural gas
- When feasible, Apache will combust natural gas that would otherwise be vented or flared
- When feasible, Apache will minimize venting through pump downs of vessels and reducing time required to purge equipment before returning to service
- When feasible, Apache will shut in wells in the event of a takeaway disruption, emergency situations, or other operations where venting or flaring may occur due to equipment failures
- Reduce number of blowdowns by looking for opportunities to coordinate repair and maintenance activities