

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**District III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170**District IV**1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101
August 1, 2011

Permit 362781

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 30-015-55001
4. Property Code 335857	5. Property Name CAMACHO 25 26 STATE COM	6. Well No. 203H

7. Surface Location

UL - Lot I	Section 25	Township 19S	Range 27E	Lot Idn	Feet From 2482	N/S Line S	Feet From 750	E/W Line E	County Eddy
---------------	---------------	-----------------	--------------	---------	-------------------	---------------	------------------	---------------	----------------

8. Proposed Bottom Hole Location

UL - Lot L	Section 26	Township 19S	Range 27E	Lot Idn L	Feet From 1866	N/S Line S	Feet From 50	E/W Line W	County Eddy
---------------	---------------	-----------------	--------------	--------------	-------------------	---------------	-----------------	---------------	----------------

9. Pool Information

WINCHESTER; BONE SPRING, WEST	97569
-------------------------------	-------

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 17880	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 8/12/2024
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	17880	2758	400

Casing/Cement Program: Additional Comments

--

22. Proposed Blowout Prevention Program

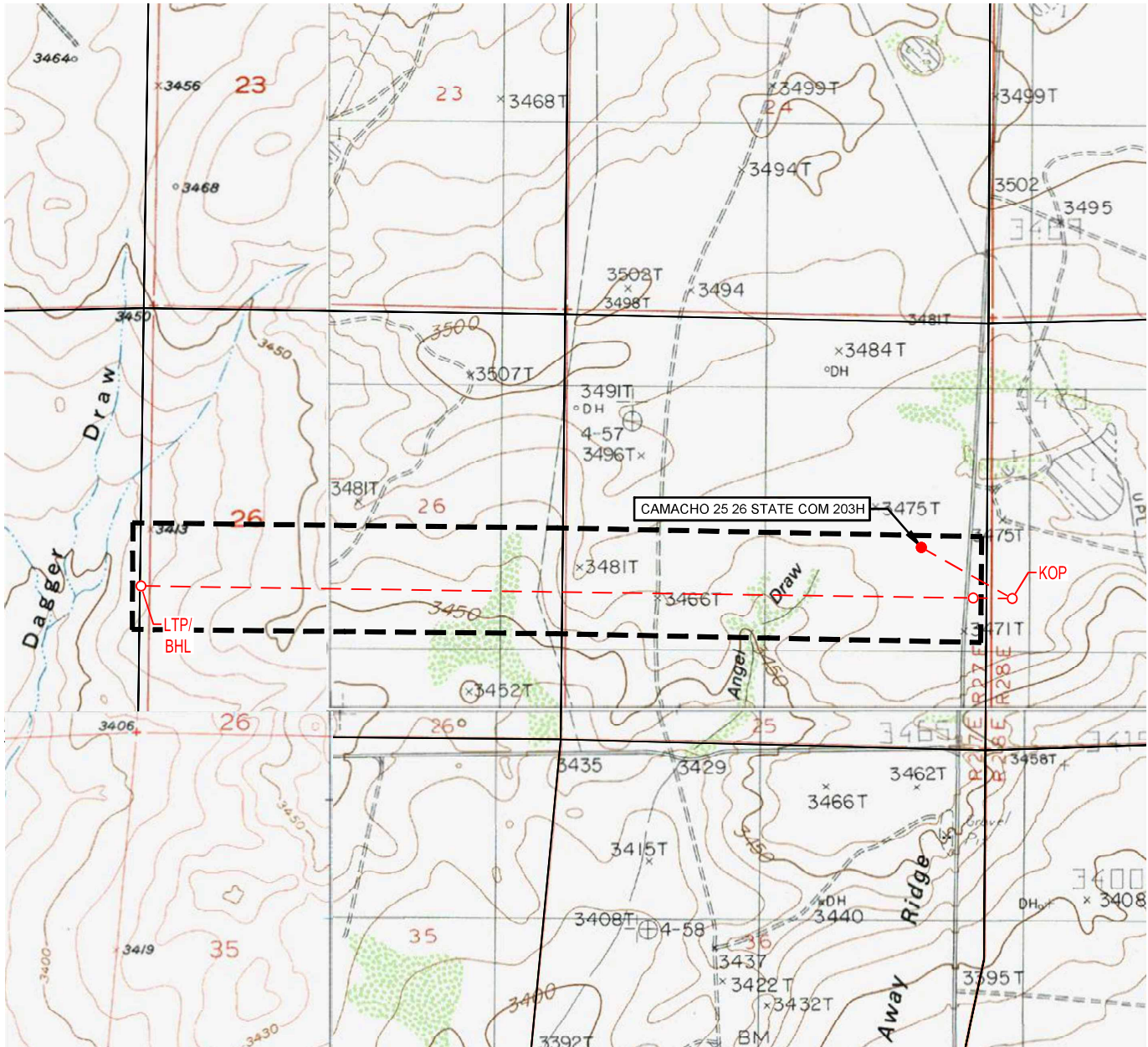
Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	1500	
Double Ram	3000	3000	

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
--	---

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



LOCATION & ELEVATION VERIFICATION MAP



Apache

LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 203H

SECTION 25 TWP 19-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3470'
 DESCRIPTION 2482' FSL & 750' FEL

LATITUDE N 32.6307766 LONGITUDE W 104.2263341

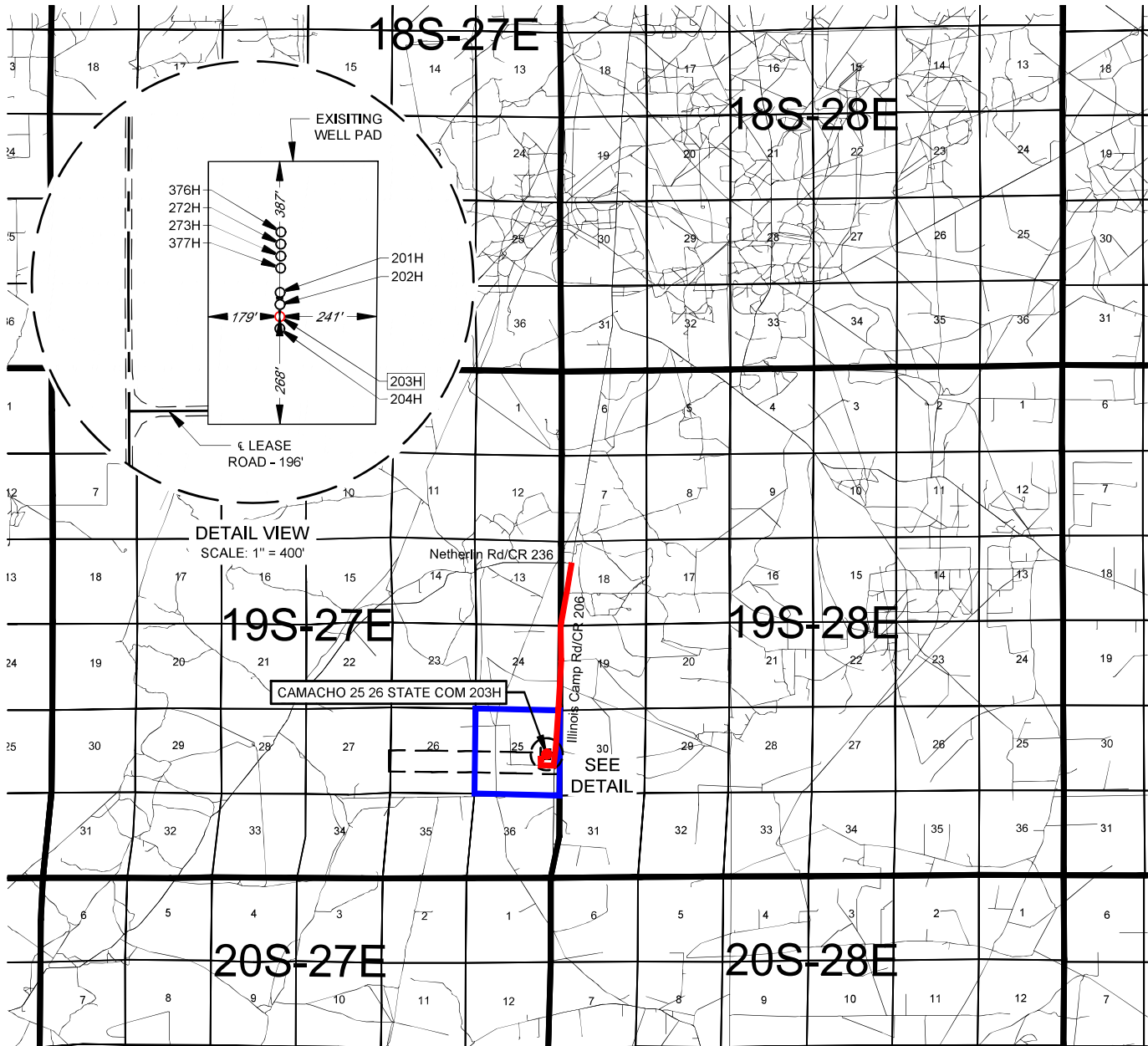
SCALE: 1" = 2000'
 0' 1000' 2000'

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



Apache

LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 203H

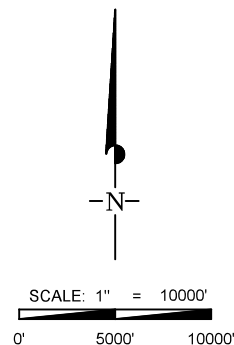
SECTION 25 TWP 19-S RGE 27-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM
 DESCRIPTION 2482' FSL & 750' FEL

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 ±295 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.

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.

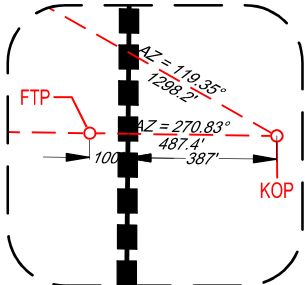
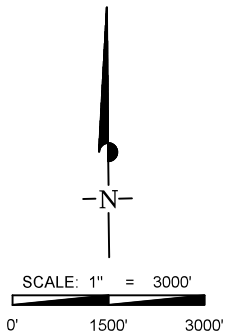


TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

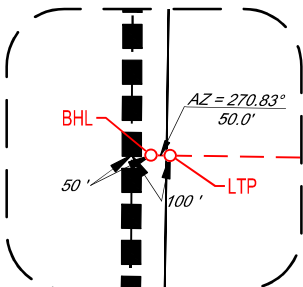
481 WINSBROOK ROAD, Ste. 200 • BENBROOK, TEXAS 76126
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

Apache
EXHIBIT 2A

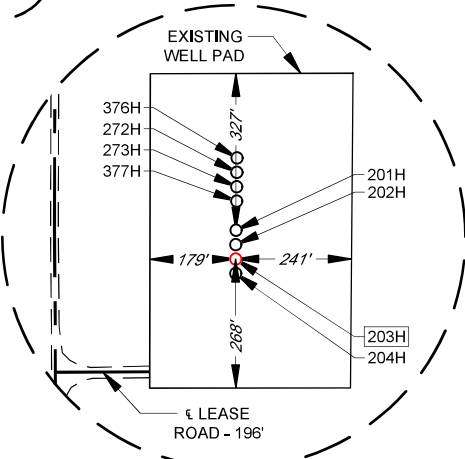
SECTION 25, TOWNSHIP 19-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



DETAIL VIEW A
SCALE: 1" = 500'



DETAIL VIEW B
SCALE: 1" = 500'



DETAIL VIEW C
SCALE: 1" = 400'

SURFACE LOCATION (SHL)

NEW MEXICO EAST
NAD 1983
X=574277 Y=593224
LAT.: N 32.6307766
LONG.: W 104.2263341
2482' FSL 750' FEL

KICK OFF POINT (KOP)

NEW MEXICO EAST
NAD 1983
X=575409 Y=592588
LAT.: N 32.6290242
LONG.: W 104.2226604
1850' FSL 387' FWL

FIRST TAKE POINT (FTP)

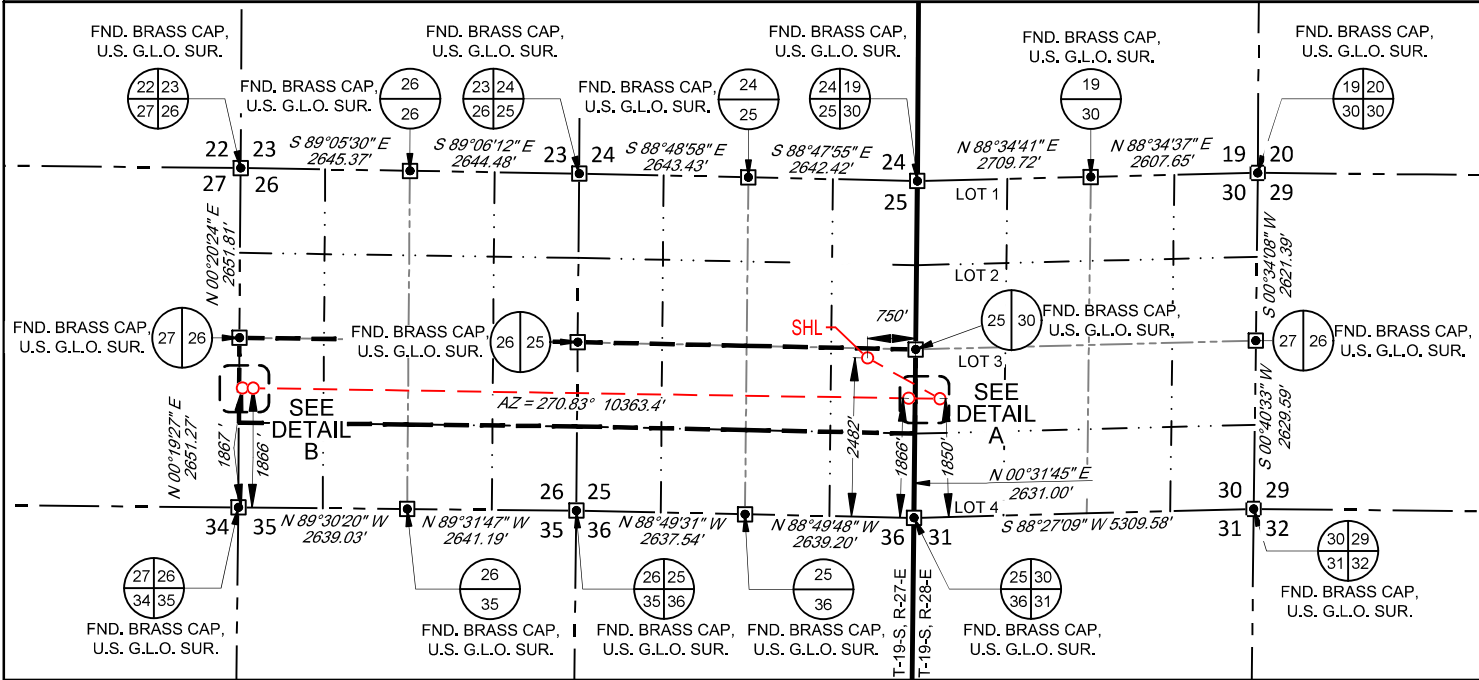
NEW MEXICO EAST
NAD 1983
X=574921 Y=592595
LAT.: N 32.6290449
LONG.: W 104.2242436
1866' FSL 100' FEL

LAST TAKE POINT (LTP)

NEW MEXICO EAST
NAD 1983
X=564559 Y=592744
LAT.: N 32.6294809
LONG.: W 104.2579033
1866' FSL 100' FWL

BOTTOM HOLE LOCATION (BHL)

NEW MEXICO EAST
NAD 1983
X=564509 Y=592745
LAT.: N 32.6294830
LONG.: W 104.2580657
1867' FSL 50' FWL



LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 203H

SECTION 25 TWP 19-S RGE 27-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 2482' 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 ±295 FEET SOUTHWEST OF THE LOCATION.



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

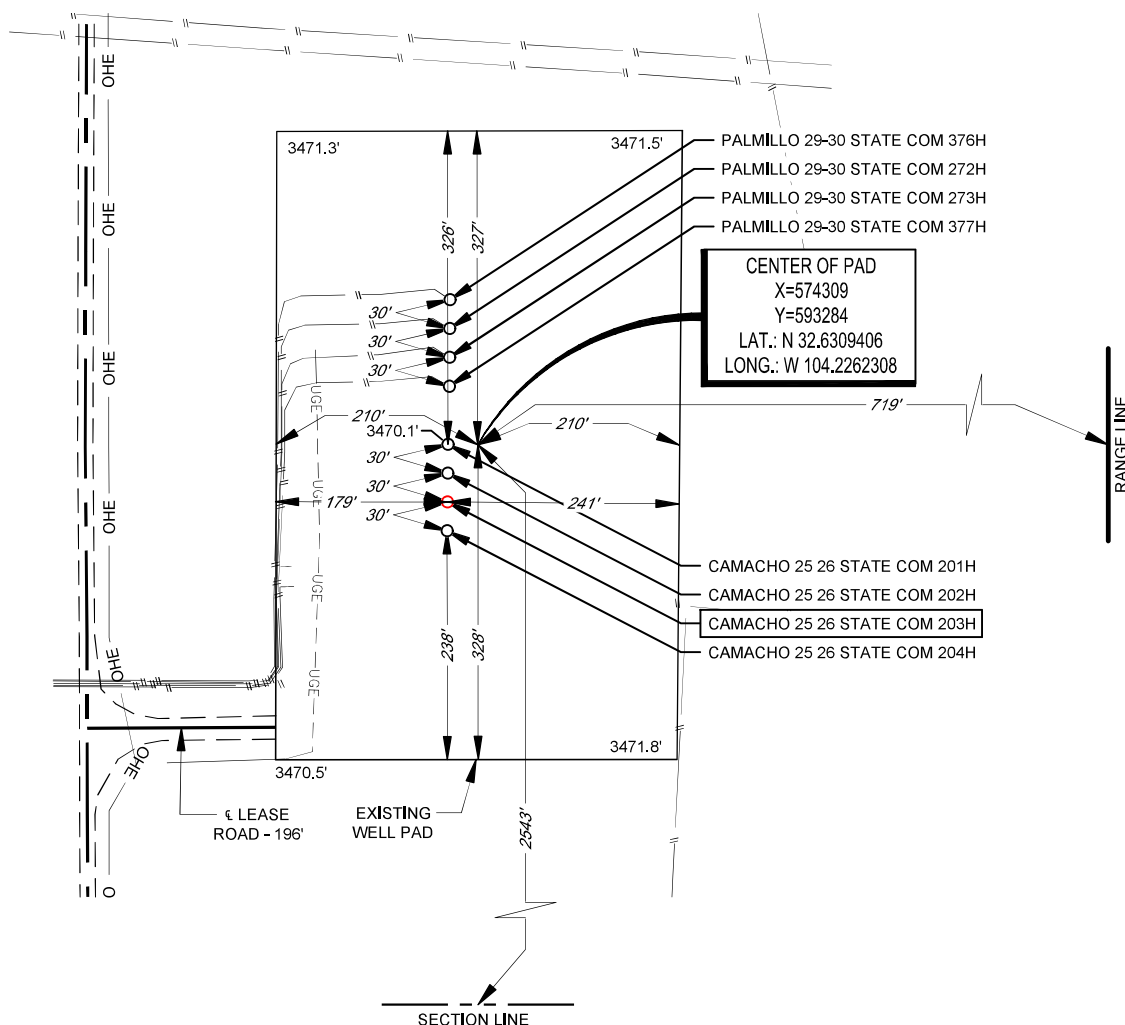
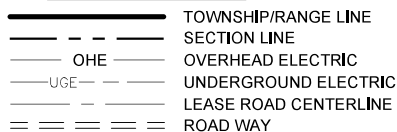


481 WINSOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

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.

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.

DETAIL VIEW
SCALE: 1" = 200'



LEASE NAME & WELL NO.: CAMACHO 25 26 STATE COM 203H
203H LATITUDE N 32.6308591 203H LONGITUDE W 104.2263331

CENTER OF PAD IS 2543' FSL & 719' FEL

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"



481 WNSCOTT 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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form APD Conditions
Permit 362781

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: APACHE CORPORATION [873] 303 Veterans Airpark Ln Midland, TX 79705		API Number: 30-015-55001
		Well: CAMACHO 25 26 STATE COM #203H
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 203H

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 203H
Wellbore: OH
Design: Plan #1
Lat: 32.630779
Long: -104.226332
GL: 3470.00
KB: RKB=30ft @ 3500.00usft

WELLBORE TARGET DETAILS (LAT/LONG)

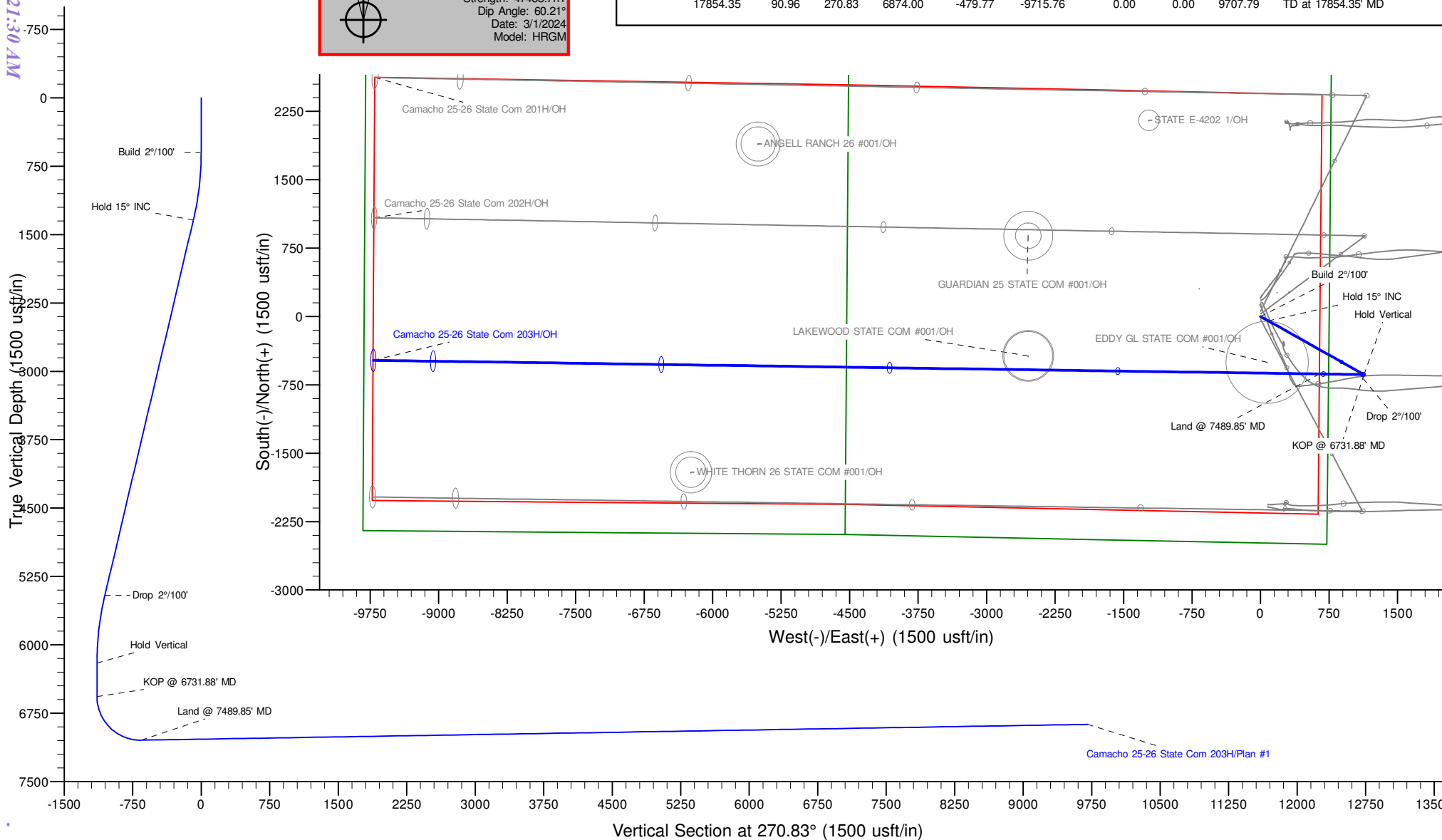
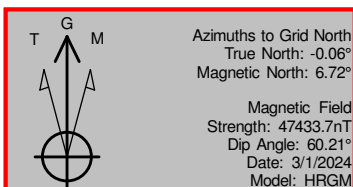
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
C203_LTP	6874.00	-479.77	-9715.76	592745.13	564561.74	Point
C203_FTP	7047.00	-629.43	646.18	592595.47	574923.68	Point

WELL DETAILS: Camacho 25-26 State Com 203H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	593224.90	574277.50	32.630779	-104.226332

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°/100'
1349.92	15.00	119.35	1341.38	-47.84	85.07	2.00	119.35	-85.75	Hold 15° INC
5612.36	15.00	119.35	5458.62	-588.56	1046.53	0.00	0.00	-1054.95	Drop 2°/100'
6362.28	0.00	0.00	6200.00	-636.40	1131.60	2.00	180.00	-1140.70	Hold Vertical
6731.88	0.00	0.00	6569.60	-636.40	1131.60	0.00	0.00	-1140.70	KOP @ 6731.88' MD
7489.85	90.96	270.83	7047.00	-629.39	646.22	12.00	270.83	-655.27	Land @ 7489.85' MD
17854.35	90.96	270.83	6874.00	-479.77	-9715.76	0.00	0.00	9707.79	TD at 17854.35' MD



Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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 203H		
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:	32.630779
		Longitude:	-104.226332
		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	47,433.65014361

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	270.83

Plan Survey Tool Program	Date	3/1/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,853.93 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	
1,349.92	15.00	119.35	1,341.38	-47.84	85.07	2.00	2.00	0.00	119.35	
5,612.36	15.00	119.35	5,458.62	-588.56	1,046.53	0.00	0.00	0.00	0.00	
6,362.28	0.00	0.00	6,200.00	-636.40	1,131.60	2.00	-2.00	0.00	180.00	
6,731.88	0.00	0.00	6,569.60	-636.40	1,131.60	0.00	0.00	0.00	0.00	
7,489.85	90.96	270.83	7,047.00	-629.39	646.22	12.00	12.00	-11.76	270.83	
17,854.35	90.96	270.83	6,874.00	-479.77	-9,715.76	0.00	0.00	0.00	0.00	

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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°/100'									
700.00	2.00	119.35	699.98	-0.86	1.52	-1.53	2.00	2.00	0.00
800.00	4.00	119.35	799.84	-3.42	6.08	-6.13	2.00	2.00	0.00
900.00	6.00	119.35	899.45	-7.69	13.68	-13.79	2.00	2.00	0.00
1,000.00	8.00	119.35	998.70	-13.67	24.30	-24.50	2.00	2.00	0.00
1,100.00	10.00	119.35	1,097.47	-21.33	37.94	-38.24	2.00	2.00	0.00
1,200.00	12.00	119.35	1,195.62	-30.69	54.57	-55.00	2.00	2.00	0.00
1,300.00	14.00	119.35	1,293.06	-41.71	74.17	-74.77	2.00	2.00	0.00
1,349.92	15.00	119.35	1,341.38	-47.84	85.07	-85.75	2.00	2.00	0.00
Hold 15° INC									
1,400.00	15.00	119.35	1,389.76	-54.19	96.36	-97.14	0.00	0.00	0.00
1,500.00	15.00	119.35	1,486.35	-66.88	118.92	-119.87	0.00	0.00	0.00
1,600.00	15.00	119.35	1,582.95	-79.56	141.48	-142.61	0.00	0.00	0.00
1,700.00	15.00	119.35	1,679.54	-92.25	164.03	-165.35	0.00	0.00	0.00
1,800.00	15.00	119.35	1,776.13	-104.94	186.59	-188.09	0.00	0.00	0.00
1,900.00	15.00	119.35	1,872.73	-117.62	209.15	-210.83	0.00	0.00	0.00
2,000.00	15.00	119.35	1,969.32	-130.31	231.70	-233.57	0.00	0.00	0.00
2,100.00	15.00	119.35	2,065.91	-142.99	254.26	-256.30	0.00	0.00	0.00
2,200.00	15.00	119.35	2,162.50	-155.68	276.82	-279.04	0.00	0.00	0.00
2,300.00	15.00	119.35	2,259.10	-168.36	299.37	-301.78	0.00	0.00	0.00
2,400.00	15.00	119.35	2,355.69	-181.05	321.93	-324.52	0.00	0.00	0.00
2,500.00	15.00	119.35	2,452.28	-193.74	344.49	-347.26	0.00	0.00	0.00
2,600.00	15.00	119.35	2,548.88	-206.42	367.04	-369.99	0.00	0.00	0.00
2,700.00	15.00	119.35	2,645.47	-219.11	389.60	-392.73	0.00	0.00	0.00
2,800.00	15.00	119.35	2,742.06	-231.79	412.16	-415.47	0.00	0.00	0.00
2,900.00	15.00	119.35	2,838.66	-244.48	434.71	-438.21	0.00	0.00	0.00
3,000.00	15.00	119.35	2,935.25	-257.16	457.27	-460.95	0.00	0.00	0.00
3,100.00	15.00	119.35	3,031.84	-269.85	479.83	-483.69	0.00	0.00	0.00
3,200.00	15.00	119.35	3,128.44	-282.54	502.38	-506.42	0.00	0.00	0.00
3,300.00	15.00	119.35	3,225.03	-295.22	524.94	-529.16	0.00	0.00	0.00
3,400.00	15.00	119.35	3,321.62	-307.91	547.50	-551.90	0.00	0.00	0.00
3,500.00	15.00	119.35	3,418.22	-320.59	570.05	-574.64	0.00	0.00	0.00
3,600.00	15.00	119.35	3,514.81	-333.28	592.61	-597.38	0.00	0.00	0.00
3,700.00	15.00	119.35	3,611.40	-345.96	615.17	-620.11	0.00	0.00	0.00
3,800.00	15.00	119.35	3,708.00	-358.65	637.72	-642.85	0.00	0.00	0.00
3,900.00	15.00	119.35	3,804.59	-371.34	660.28	-665.59	0.00	0.00	0.00
4,000.00	15.00	119.35	3,901.18	-384.02	682.84	-688.33	0.00	0.00	0.00
4,100.00	15.00	119.35	3,997.78	-396.71	705.40	-711.07	0.00	0.00	0.00
4,200.00	15.00	119.35	4,094.37	-409.39	727.95	-733.81	0.00	0.00	0.00
4,300.00	15.00	119.35	4,190.96	-422.08	750.51	-756.54	0.00	0.00	0.00
4,400.00	15.00	119.35	4,287.56	-434.76	773.07	-779.28	0.00	0.00	0.00
4,500.00	15.00	119.35	4,384.15	-447.45	795.62	-802.02	0.00	0.00	0.00
4,600.00	15.00	119.35	4,480.74	-460.14	818.18	-824.76	0.00	0.00	0.00
4,700.00	15.00	119.35	4,577.34	-472.82	840.74	-847.50	0.00	0.00	0.00
4,800.00	15.00	119.35	4,673.93	-485.51	863.29	-870.23	0.00	0.00	0.00
4,900.00	15.00	119.35	4,770.52	-498.19	885.85	-892.97	0.00	0.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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	15.00	119.35	4,867.12	-510.88	908.41	-915.71	0.00	0.00	0.00
5,100.00	15.00	119.35	4,963.71	-523.56	930.96	-938.45	0.00	0.00	0.00
5,200.00	15.00	119.35	5,060.30	-536.25	953.52	-961.19	0.00	0.00	0.00
5,300.00	15.00	119.35	5,156.90	-548.94	976.08	-983.93	0.00	0.00	0.00
5,400.00	15.00	119.35	5,253.49	-561.62	998.63	-1,006.66	0.00	0.00	0.00
5,500.00	15.00	119.35	5,350.08	-574.31	1,021.19	-1,029.40	0.00	0.00	0.00
5,600.00	15.00	119.35	5,446.68	-586.99	1,043.75	-1,052.14	0.00	0.00	0.00
5,612.36	15.00	119.35	5,458.62	-588.56	1,046.53	-1,054.95	0.00	0.00	0.00
Drop 2°/100'									
5,700.00	13.25	119.35	5,543.60	-599.04	1,065.17	-1,073.74	2.00	-2.00	0.00
5,800.00	11.25	119.35	5,641.32	-609.44	1,083.66	-1,092.37	2.00	-2.00	0.00
5,900.00	9.25	119.35	5,739.72	-618.16	1,099.16	-1,108.00	2.00	-2.00	0.00
6,000.00	7.25	119.35	5,838.69	-625.19	1,111.66	-1,120.60	2.00	-2.00	0.00
6,100.00	5.25	119.35	5,938.09	-630.52	1,121.14	-1,130.16	2.00	-2.00	0.00
6,200.00	3.25	119.35	6,037.81	-634.15	1,127.59	-1,136.66	2.00	-2.00	0.00
6,300.00	1.25	119.35	6,137.73	-636.07	1,131.01	-1,140.11	2.00	-2.00	0.00
6,362.28	0.00	0.00	6,200.00	-636.40	1,131.60	-1,140.70	2.00	-2.00	0.00
Hold Vertical									
6,400.00	0.00	0.00	6,237.72	-636.40	1,131.60	-1,140.70	0.00	0.00	0.00
6,500.00	0.00	0.00	6,337.72	-636.40	1,131.60	-1,140.70	0.00	0.00	0.00
6,600.00	0.00	0.00	6,437.72	-636.40	1,131.60	-1,140.70	0.00	0.00	0.00
6,700.00	0.00	0.00	6,537.72	-636.40	1,131.60	-1,140.70	0.00	0.00	0.00
6,731.88	0.00	0.00	6,569.60	-636.40	1,131.60	-1,140.70	0.00	0.00	0.00
KOP @ 6731.88' MD									
6,750.00	2.17	270.83	6,587.72	-636.40	1,131.26	-1,140.36	12.00	12.00	0.00
6,775.00	5.17	270.83	6,612.66	-636.37	1,129.65	-1,138.75	12.00	12.00	0.00
6,800.00	8.17	270.83	6,637.49	-636.33	1,126.75	-1,135.85	12.00	12.00	0.00
6,825.00	11.17	270.83	6,662.13	-636.27	1,122.55	-1,131.65	12.00	12.00	0.00
6,850.00	14.17	270.83	6,686.52	-636.19	1,117.06	-1,126.16	12.00	12.00	0.00
6,875.00	17.17	270.83	6,710.59	-636.09	1,110.31	-1,119.41	12.00	12.00	0.00
6,900.00	20.17	270.83	6,734.27	-635.98	1,102.31	-1,111.41	12.00	12.00	0.00
6,925.00	23.17	270.83	6,757.50	-635.84	1,093.08	-1,102.17	12.00	12.00	0.00
6,950.00	26.17	270.83	6,780.21	-635.69	1,082.64	-1,091.74	12.00	12.00	0.00
6,975.00	29.17	270.83	6,802.35	-635.53	1,071.03	-1,080.13	12.00	12.00	0.00
7,000.00	32.17	270.83	6,823.85	-635.34	1,058.28	-1,067.38	12.00	12.00	0.00
7,025.00	35.17	270.83	6,844.65	-635.14	1,044.42	-1,053.52	12.00	12.00	0.00
7,050.00	38.17	270.83	6,864.70	-634.93	1,029.50	-1,038.59	12.00	12.00	0.00
7,075.00	41.17	270.83	6,883.94	-634.70	1,013.54	-1,022.63	12.00	12.00	0.00
7,100.00	44.17	270.83	6,902.32	-634.45	996.60	-1,005.68	12.00	12.00	0.00
7,125.00	47.17	270.83	6,919.79	-634.19	978.72	-987.80	12.00	12.00	0.00
7,150.00	50.17	270.83	6,936.29	-633.92	959.95	-969.03	12.00	12.00	0.00
7,175.00	53.17	270.83	6,951.79	-633.64	940.34	-949.42	12.00	12.00	0.00
7,200.00	56.17	270.83	6,966.25	-633.34	919.95	-929.02	12.00	12.00	0.00
7,225.00	59.17	270.83	6,979.61	-633.04	898.82	-907.90	12.00	12.00	0.00
7,250.00	62.17	270.83	6,991.86	-632.72	877.03	-886.11	12.00	12.00	0.00
7,275.00	65.17	270.83	7,002.94	-632.40	854.63	-863.70	12.00	12.00	0.00
7,300.00	68.17	270.83	7,012.84	-632.07	831.68	-840.75	12.00	12.00	0.00
7,325.00	71.17	270.83	7,021.52	-631.73	808.24	-817.31	12.00	12.00	0.00
7,350.00	74.17	270.83	7,028.97	-631.39	784.38	-793.44	12.00	12.00	0.00
7,375.00	77.17	270.83	7,035.15	-631.04	760.16	-769.22	12.00	12.00	0.00
7,400.00	80.17	270.83	7,040.06	-630.68	735.65	-744.71	12.00	12.00	0.00
7,425.00	83.17	270.83	7,043.68	-630.33	710.92	-719.98	12.00	12.00	0.00
7,450.00	86.17	270.83	7,046.00	-629.97	686.04	-695.09	12.00	12.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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)
7,475.00	89.17	270.83	7,047.01	-629.61	661.06	-670.11	12.00	12.00	0.00
7,489.85	90.96	270.83	7,047.00	-629.39	646.22	-655.27	12.00	12.00	0.00
Land @ 7489.85' MD									
7,500.00	90.96	270.83	7,046.83	-629.24	636.07	-645.12	0.00	0.00	0.00
7,600.00	90.96	270.83	7,045.16	-627.80	536.09	-545.13	0.00	0.00	0.00
7,700.00	90.96	270.83	7,043.49	-626.36	436.12	-445.14	0.00	0.00	0.00
7,800.00	90.96	270.83	7,041.82	-624.91	336.14	-345.16	0.00	0.00	0.00
7,900.00	90.96	270.83	7,040.15	-623.47	236.17	-245.17	0.00	0.00	0.00
8,000.00	90.96	270.83	7,038.48	-622.03	136.19	-145.19	0.00	0.00	0.00
8,100.00	90.96	270.83	7,036.81	-620.58	36.21	-45.20	0.00	0.00	0.00
8,200.00	90.96	270.83	7,035.14	-619.14	-63.76	54.79	0.00	0.00	0.00
8,300.00	90.96	270.83	7,033.48	-617.70	-163.74	154.77	0.00	0.00	0.00
8,400.00	90.96	270.83	7,031.81	-616.25	-263.71	254.76	0.00	0.00	0.00
8,500.00	90.96	270.83	7,030.14	-614.81	-363.69	354.74	0.00	0.00	0.00
8,600.00	90.96	270.83	7,028.47	-613.37	-463.66	454.73	0.00	0.00	0.00
8,700.00	90.96	270.83	7,026.80	-611.92	-563.64	554.72	0.00	0.00	0.00
8,800.00	90.96	270.83	7,025.13	-610.48	-663.62	654.70	0.00	0.00	0.00
8,900.00	90.96	270.83	7,023.46	-609.04	-763.59	754.69	0.00	0.00	0.00
9,000.00	90.96	270.83	7,021.79	-607.59	-863.57	854.68	0.00	0.00	0.00
9,100.00	90.96	270.83	7,020.12	-606.15	-963.54	954.66	0.00	0.00	0.00
9,200.00	90.96	270.83	7,018.45	-604.70	-1,063.52	1,054.65	0.00	0.00	0.00
9,300.00	90.96	270.83	7,016.78	-603.26	-1,163.49	1,154.63	0.00	0.00	0.00
9,400.00	90.96	270.83	7,015.11	-601.82	-1,263.47	1,254.62	0.00	0.00	0.00
9,500.00	90.96	270.83	7,013.45	-600.37	-1,363.45	1,354.61	0.00	0.00	0.00
9,600.00	90.96	270.83	7,011.78	-598.93	-1,463.42	1,454.59	0.00	0.00	0.00
9,700.00	90.96	270.83	7,010.11	-597.49	-1,563.40	1,554.58	0.00	0.00	0.00
9,800.00	90.96	270.83	7,008.44	-596.04	-1,663.37	1,654.56	0.00	0.00	0.00
9,900.00	90.96	270.83	7,006.77	-594.60	-1,763.35	1,754.55	0.00	0.00	0.00
10,000.00	90.96	270.83	7,005.10	-593.16	-1,863.32	1,854.54	0.00	0.00	0.00
10,100.00	90.96	270.83	7,003.43	-591.71	-1,963.30	1,954.52	0.00	0.00	0.00
10,200.00	90.96	270.83	7,001.76	-590.27	-2,063.27	2,054.51	0.00	0.00	0.00
10,300.00	90.96	270.83	7,000.09	-588.83	-2,163.25	2,154.49	0.00	0.00	0.00
10,400.00	90.96	270.83	6,998.42	-587.38	-2,263.23	2,254.48	0.00	0.00	0.00
10,500.00	90.96	270.83	6,996.75	-585.94	-2,363.20	2,354.47	0.00	0.00	0.00
10,600.00	90.96	270.83	6,995.08	-584.49	-2,463.18	2,454.45	0.00	0.00	0.00
10,700.00	90.96	270.83	6,993.42	-583.05	-2,563.15	2,554.44	0.00	0.00	0.00
10,800.00	90.96	270.83	6,991.75	-581.61	-2,663.13	2,654.42	0.00	0.00	0.00
10,900.00	90.96	270.83	6,990.08	-580.16	-2,763.10	2,754.41	0.00	0.00	0.00
11,000.00	90.96	270.83	6,988.41	-578.72	-2,863.08	2,854.40	0.00	0.00	0.00
11,100.00	90.96	270.83	6,986.74	-577.28	-2,963.06	2,954.38	0.00	0.00	0.00
11,200.00	90.96	270.83	6,985.07	-575.83	-3,063.03	3,054.37	0.00	0.00	0.00
11,300.00	90.96	270.83	6,983.40	-574.39	-3,163.01	3,154.35	0.00	0.00	0.00
11,400.00	90.96	270.83	6,981.73	-572.95	-3,262.98	3,254.34	0.00	0.00	0.00
11,500.00	90.96	270.83	6,980.06	-571.50	-3,362.96	3,354.33	0.00	0.00	0.00
11,600.00	90.96	270.83	6,978.39	-570.06	-3,462.93	3,454.31	0.00	0.00	0.00
11,700.00	90.96	270.83	6,976.72	-568.62	-3,562.91	3,554.30	0.00	0.00	0.00
11,800.00	90.96	270.83	6,975.06	-567.17	-3,662.89	3,654.29	0.00	0.00	0.00
11,900.00	90.96	270.83	6,973.39	-565.73	-3,762.86	3,754.27	0.00	0.00	0.00
12,000.00	90.96	270.83	6,971.72	-564.28	-3,862.84	3,854.26	0.00	0.00	0.00
12,100.00	90.96	270.83	6,970.05	-562.84	-3,962.81	3,954.24	0.00	0.00	0.00
12,200.00	90.96	270.83	6,968.38	-561.40	-4,062.79	4,054.23	0.00	0.00	0.00
12,300.00	90.96	270.83	6,966.71	-559.95	-4,162.76	4,154.22	0.00	0.00	0.00
12,400.00	90.96	270.83	6,965.04	-558.51	-4,262.74	4,254.20	0.00	0.00	0.00
12,500.00	90.96	270.83	6,963.37	-557.07	-4,362.71	4,354.19	0.00	0.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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)
12,600.00	90.96	270.83	6,961.70	-555.62	-4,462.69	4,454.17	0.00	0.00	0.00
12,700.00	90.96	270.83	6,960.03	-554.18	-4,562.67	4,554.16	0.00	0.00	0.00
12,800.00	90.96	270.83	6,958.36	-552.74	-4,662.64	4,654.15	0.00	0.00	0.00
12,900.00	90.96	270.83	6,956.69	-551.29	-4,762.62	4,754.13	0.00	0.00	0.00
13,000.00	90.96	270.83	6,955.03	-549.85	-4,862.59	4,854.12	0.00	0.00	0.00
13,100.00	90.96	270.83	6,953.36	-548.41	-4,962.57	4,954.10	0.00	0.00	0.00
13,200.00	90.96	270.83	6,951.69	-546.96	-5,062.54	5,054.09	0.00	0.00	0.00
13,300.00	90.96	270.83	6,950.02	-545.52	-5,162.52	5,154.08	0.00	0.00	0.00
13,400.00	90.96	270.83	6,948.35	-544.07	-5,262.50	5,254.06	0.00	0.00	0.00
13,500.00	90.96	270.83	6,946.68	-542.63	-5,362.47	5,354.05	0.00	0.00	0.00
13,600.00	90.96	270.83	6,945.01	-541.19	-5,462.45	5,454.03	0.00	0.00	0.00
13,700.00	90.96	270.83	6,943.34	-539.74	-5,562.42	5,554.02	0.00	0.00	0.00
13,800.00	90.96	270.83	6,941.67	-538.30	-5,662.40	5,654.01	0.00	0.00	0.00
13,900.00	90.96	270.83	6,940.00	-536.86	-5,762.37	5,753.99	0.00	0.00	0.00
14,000.00	90.96	270.83	6,938.33	-535.41	-5,862.35	5,853.98	0.00	0.00	0.00
14,100.00	90.96	270.83	6,936.67	-533.97	-5,962.33	5,953.96	0.00	0.00	0.00
14,200.00	90.96	270.83	6,935.00	-532.53	-6,062.30	6,053.95	0.00	0.00	0.00
14,300.00	90.96	270.83	6,933.33	-531.08	-6,162.28	6,153.94	0.00	0.00	0.00
14,400.00	90.96	270.83	6,931.66	-529.64	-6,262.25	6,253.92	0.00	0.00	0.00
14,500.00	90.96	270.83	6,929.99	-528.20	-6,362.23	6,353.91	0.00	0.00	0.00
14,600.00	90.96	270.83	6,928.32	-526.75	-6,462.20	6,453.90	0.00	0.00	0.00
14,700.00	90.96	270.83	6,926.65	-525.31	-6,562.18	6,553.88	0.00	0.00	0.00
14,800.00	90.96	270.83	6,924.98	-523.87	-6,662.15	6,653.87	0.00	0.00	0.00
14,900.00	90.96	270.83	6,923.31	-522.42	-6,762.13	6,753.85	0.00	0.00	0.00
15,000.00	90.96	270.83	6,921.64	-520.98	-6,862.11	6,853.84	0.00	0.00	0.00
15,100.00	90.96	270.83	6,919.97	-519.53	-6,962.08	6,953.83	0.00	0.00	0.00
15,200.00	90.96	270.83	6,918.30	-518.09	-7,062.06	7,053.81	0.00	0.00	0.00
15,300.00	90.96	270.83	6,916.64	-516.65	-7,162.03	7,153.80	0.00	0.00	0.00
15,400.00	90.96	270.83	6,914.97	-515.20	-7,262.01	7,253.78	0.00	0.00	0.00
15,500.00	90.96	270.83	6,913.30	-513.76	-7,361.98	7,353.77	0.00	0.00	0.00
15,600.00	90.96	270.83	6,911.63	-512.32	-7,461.96	7,453.76	0.00	0.00	0.00
15,700.00	90.96	270.83	6,909.96	-510.87	-7,561.94	7,553.74	0.00	0.00	0.00
15,800.00	90.96	270.83	6,908.29	-509.43	-7,661.91	7,653.73	0.00	0.00	0.00
15,900.00	90.96	270.83	6,906.62	-507.99	-7,761.89	7,753.71	0.00	0.00	0.00
16,000.00	90.96	270.83	6,904.95	-506.54	-7,861.86	7,853.70	0.00	0.00	0.00
16,100.00	90.96	270.83	6,903.28	-505.10	-7,961.84	7,953.69	0.00	0.00	0.00
16,200.00	90.96	270.83	6,901.61	-503.66	-8,061.81	8,053.67	0.00	0.00	0.00
16,300.00	90.96	270.83	6,899.94	-502.21	-8,161.79	8,153.66	0.00	0.00	0.00
16,400.00	90.96	270.83	6,898.28	-500.77	-8,261.77	8,253.64	0.00	0.00	0.00
16,500.00	90.96	270.83	6,896.61	-499.32	-8,361.74	8,353.63	0.00	0.00	0.00
16,600.00	90.96	270.83	6,894.94	-497.88	-8,461.72	8,453.62	0.00	0.00	0.00
16,700.00	90.96	270.83	6,893.27	-496.44	-8,561.69	8,553.60	0.00	0.00	0.00
16,800.00	90.96	270.83	6,891.60	-494.99	-8,661.67	8,653.59	0.00	0.00	0.00
16,900.00	90.96	270.83	6,889.93	-493.55	-8,761.64	8,753.57	0.00	0.00	0.00
17,000.00	90.96	270.83	6,888.26	-492.11	-8,861.62	8,853.56	0.00	0.00	0.00
17,100.00	90.96	270.83	6,886.59	-490.66	-8,961.59	8,953.55	0.00	0.00	0.00
17,200.00	90.96	270.83	6,884.92	-489.22	-9,061.57	9,053.53	0.00	0.00	0.00
17,300.00	90.96	270.83	6,883.25	-487.78	-9,161.55	9,153.52	0.00	0.00	0.00
17,400.00	90.96	270.83	6,881.58	-486.33	-9,261.52	9,253.51	0.00	0.00	0.00
17,500.00	90.96	270.83	6,879.91	-484.89	-9,361.50	9,353.49	0.00	0.00	0.00
17,600.00	90.96	270.83	6,878.25	-483.45	-9,461.47	9,453.48	0.00	0.00	0.00
17,700.00	90.96	270.83	6,876.58	-482.00	-9,561.45	9,553.46	0.00	0.00	0.00
17,800.00	90.96	270.83	6,874.91	-480.56	-9,661.42	9,653.45	0.00	0.00	0.00
17,854.35	90.96	270.83	6,874.00	-479.77	-9,715.76	9,707.79	0.00	0.00	0.00

Planning Report

Database:	Fhartmann	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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)
TD at 17854.35' 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									
C203_LTP	0.00	0.00	6,874.00	-479.77	-9,715.76	592,745.13	564,561.74	32.629483	-104.257894
- plan hits target center									
- Point									
C203_FTP	0.00	0.00	7,047.00	-629.43	646.18	592,595.47	574,923.68	32.629047	-104.224236
- plan misses target center by 0.04usft at 7489.88usft MD (7047.00 TVD, -629.39 N, 646.18 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°/100'
1,349.92	1,341.38	-47.84	85.07	Hold 15° INC
5,612.36	5,458.62	-588.56	1,046.53	Drop 2°/100'
6,362.28	6,200.00	-636.40	1,131.60	Hold Vertical
6,731.88	6,569.60	-636.40	1,131.60	KOP @ 6731.88' MD
7,489.85	7,047.00	-629.39	646.22	Land @ 7489.85' MD
17,854.35	6,874.00	-479.77	-9,715.76	TD at 17854.35' MD

Apache Corporation

Eddy Co, NM (NAD83 NM E)

Camacho 25 26 (Middle)

Camacho 25-26 State Com 203H

OH

Plan #1

Anticollision Report

01 March, 2024

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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	17,853.93	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 201H - OH - Plan #1	600.00	600.00	60.00	55.92	14.683	CC, ES
Camacho 25-26 State Com 201H - OH - Plan #1	800.00	794.73	71.07	65.60	13.003	SF
Camacho 25-26 State Com 202H - OH - Plan #1	600.00	600.00	30.10	26.01	7.366	CC, ES
Camacho 25-26 State Com 202H - OH - Plan #1	17,854.35	17,858.45	1,563.32	1,319.96	6.424	SF
Camacho 25-26 State Com 204H - OH - Plan #1	600.00	600.00	29.90	25.81	7.317	CC, ES
Camacho 25-26 State Com 204H - OH - Plan #1	17,854.35	18,209.14	1,501.74	1,258.87	6.183	SF
Camacho 25 26 Offsets						
ANGELL RANCH 26 #001 - OH - OH	13,673.60	7,042.24	2,434.55	2,205.51	10.629	CC
ANGELL RANCH 26 #001 - OH - OH	13,700.00	7,041.51	2,434.70	2,205.40	10.618	ES
ANGELL RANCH 26 #001 - OH - OH	13,900.00	7,036.03	2,445.05	2,214.17	10.590	SF
EDDY GL STATE COM #001 - OH - OH	8,065.95	7,000.88	119.41	-193.97	0.381	Collision Risk Procedures Re
GUARDIAN 25 STATE COM #001 - OH - OH	10,704.45	6,980.16	1,470.92	1,257.30	6.886	CC, ES
GUARDIAN 25 STATE COM #001 - OH - OH	10,800.00	6,978.39	1,474.16	1,259.77	6.876	SF
LAKEWOOD STATE COM #001 - OH - OH	10,683.86	6,956.92	151.85	-39.09	0.795	Collision Risk Procedures Re
Palmillo 29-30 271H - OH - OH	111.80	112.10	2,097.79	2,097.19	3,514.113	CC, ES
Palmillo 29-30 271H - OH - OH	3,900.00	3,787.19	2,492.25	2,464.65	90.304	SF
Palmillo 29-30 272H - OH - OH	181.71	181.72	179.54	178.60	190.704	CC
Palmillo 29-30 272H - OH - OH	600.00	599.05	181.62	177.69	46.197	ES
Palmillo 29-30 272H - OH - OH	7,151.38	7,503.58	1,294.10	1,241.40	24.553	SF
Palmillo 29-30 273H - OH - OH	0.00	0.00	150.01			
Palmillo 29-30 273H - OH - OH	7,340.90	7,442.49	152.99	101.36	2.963	ES
Palmillo 29-30 273H - OH - OH	7,350.00	7,435.30	153.11	101.43	2.963	SF
Palmillo 29-30 274H - OH - OH	7,225.00	7,384.12	1,505.83	1,454.00	29.051	SF
Palmillo 29-30 274H - OH - OH	7,549.42	7,050.25	1,502.78	1,451.49	29.305	CC, ES
Palmillo 29-30 375H - OH - OH	0.00	0.30	2,068.65			
Palmillo 29-30 375H - OH - OH	400.00	376.14	2,069.77	2,067.49	907.090	ES
Palmillo 29-30 375H - OH - OH	3,700.00	3,615.76	2,495.13	2,469.22	96.325	SF
Palmillo 29-30 376H - OH - OH	638.29	635.70	208.47	204.30	50.000	CC
Palmillo 29-30 376H - OH - OH	700.00	697.12	208.85	204.25	45.388	ES
Palmillo 29-30 376H - OH - OH	8,000.00	7,072.78	1,277.82	1,225.56	24.455	SF
Palmillo 29-30 377H - OH - OH	7,800.00	7,113.13	70.52	18.44	1.354	Collision Risk Procedures Re
Palmillo 29-30 377H - OH - OH	7,804.45	7,112.78	70.50	18.53	1.357	Collision Risk Procedures Re
Palmillo 29-30 378H - OH - OH	7,833.39	7,040.54	1,417.76	1,366.16	27.473	CC, ES
Palmillo 29-30 378H - OH - OH	7,900.00	7,039.54	1,419.33	1,367.63	27.458	SF
STATE E-4202 1 - OH - OH	600.00	580.00	2,476.24	2,445.93	81.708	CC
STATE E-4202 1 - OH - OH	700.00	679.98	2,477.73	2,443.03	71.390	ES

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 203H
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 203H	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

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 Offsets						
STATE E-4202 1 - OH - OH	900.00	879.45	2,489.70	2,446.21	57.257	SF
WHITE THORN 26 STATE COM #001 - OH - OH	14,358.81	6,872.41	1,177.10	953.72	5.269	CC, ES
WHITE THORN 26 STATE COM #001 - OH - OH	14,400.00	6,871.80	1,177.83	954.03	5.263	SF

Offset Design:		Camacho 25 26 (Middle) - Camacho 25-26 State Com 201H - 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
Reference	Offset	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance				Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+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	0.48	60.00	0.50	60.00							
100.00	100.00	100.00	100.00	0.25	0.25	0.48	60.00	0.50	60.00	59.50	0.50	119.559				
200.00	200.00	200.00	200.00	0.61	0.61	0.48	60.00	0.50	60.00	58.78	1.22	49.230				
300.00	300.00	300.00	300.00	0.97	0.97	0.48	60.00	0.50	60.00	58.07	1.94	30.997				
400.00	400.00	400.00	400.00	1.33	1.33	0.48	60.00	0.50	60.00	57.35	2.65	22.619				
500.00	500.00	500.00	500.00	1.68	1.68	0.48	60.00	0.50	60.00	56.63	3.37	17.807				
600.00	600.00	600.00	600.00	2.04	2.04	0.48	60.00	0.50	60.00	55.92	4.09	14.683	CC, ES			
700.00	699.98	697.61	697.58	2.39	2.39	-119.37	61.87	1.42	62.77	57.99	4.78	13.126				
800.00	799.84	794.73	794.49	2.73	2.74	-120.60	67.42	4.14	71.07	65.60	5.47	13.003	SF			
900.00	899.45	890.87	890.09	3.08	3.09	-122.08	76.55	8.62	84.91	78.76	6.15	13.815				
1,000.00	998.70	985.57	983.76	3.42	3.43	-123.43	89.05	14.76	104.23	97.41	6.82	15.289				
1,100.00	1,097.47	1,078.42	1,074.95	3.78	3.77	-124.49	104.66	22.43	128.93	121.45	7.48	17.245				
1,200.00	1,195.62	1,169.04	1,163.21	4.14	4.09	-125.23	123.09	31.48	158.84	150.72	8.12	19.561				
1,300.00	1,293.06	1,257.09	1,248.13	4.51	4.41	-125.70	143.98	41.73	193.78	185.04	8.75	22.156				
1,349.92	1,341.38	1,300.00	1,289.17	4.70	4.56	-125.84	155.21	47.25	213.04	203.99	9.05	23.530				
1,400.00	1,389.76	1,342.42	1,329.50	4.89	4.72	-126.21	167.00	53.04	233.31	223.96	9.35	24.945				
1,500.00	1,486.35	1,425.47	1,407.73	5.27	5.03	-126.47	192.00	65.32	275.81	265.88	9.94	27.762				
1,600.00	1,582.95	1,506.21	1,482.78	5.66	5.34	-126.32	218.74	78.44	320.92	310.42	10.50	30.571				
1,700.00	1,679.54	1,584.55	1,554.55	6.05	5.65	-125.92	246.93	92.28	368.53	357.49	11.04	33.384				
1,800.00	1,776.13	1,660.42	1,622.99	6.44	5.95	-125.37	276.31	106.71	418.55	406.99	11.56	36.208				
1,900.00	1,872.73	1,733.78	1,688.10	6.83	6.25	-124.75	306.64	121.61	470.90	458.85	12.06	39.050				
2,000.00	1,969.32	1,808.62	1,753.44	7.23	6.55	-124.07	339.39	137.68	525.41	512.83	12.58	41.757				
2,100.00	2,065.91	1,891.90	1,825.86	7.63	6.91	-123.40	376.30	155.81	580.51	567.29	13.21	43.937				
2,200.00	2,162.50	1,975.18	1,898.28	8.03	7.26	-122.85	413.22	173.93	635.64	621.80	13.85	45.902				
2,300.00	2,259.10	2,058.46	1,970.70	8.43	7.62	-122.39	450.13	192.06	690.82	676.33	14.49	47.680				
2,400.00	2,355.69	2,141.74	2,043.12	8.83	7.99	-121.99	487.04	210.18	746.02	730.88	15.13	49.296				
2,500.00	2,452.28	2,225.03	2,115.54	9.23	8.35	-121.65	523.96	228.31	801.24	785.45	15.78	50.769				
2,600.00	2,548.88	2,308.31	2,187.96	9.64	8.72	-121.35	560.87	246.43	856.47	840.04	16.43	52.117				
2,700.00	2,645.47	2,391.59	2,260.38	10.04	9.10	-121.09	597.79	264.56	911.73	894.64	17.09	53.353				
2,800.00	2,742.06	2,474.87	2,332.80	10.44	9.47	-120.86	634.70	282.69	966.99	949.25	17.75	54.491				
2,900.00	2,838.66	2,558.15	2,405.22	10.85	9.85	-120.65	671.62	300.81	1,022.26	1,003.86	18.41	55.541				
3,000.00	2,935.25	2,641.44	2,477.64	11.26	10.23	-120.47	708.53	318.94	1,077.55	1,058.48	19.07	56.514				
3,100.00	3,031.84	2,724.72	2,550.06	11.66	10.61	-120.30	745.44	337.06	1,132.84	1,113.11	19.73	57.416				
3,200.00	3,128.44	2,808.00	2,622.48	12.07	10.99	-120.15	782.36	355.19	1,188.13	1,167.74	20.40	58.254				
3,300.00	3,225.03	2,891.28	2,694.90	12.47	11.38	-120.01	819.27	373.31	1,243.43	1,222.37	21.06	59.036				
3,400.00	3,321.62	2,974.56	2,767.32	12.88	11.76	-119.88	856.19	391.44	1,298.74	1,277.01	21.73	59.766				
3,500.00	3,418.22	3,057.85	2,839.74	13.29	12.15	-119.77	893.10	409.56	1,354.05	1,331.65	22.40	60.449				
3,600.00	3,514.81	3,141.13	2,912.16	13.70	12.54	-119.66	930.01	427.69	1,409.36	1,386.29	23.07	61.089				
3,700.00	3,611.40	3,224.41	2,984.58	14.10	12.92	-119.56	966.93	445.81	1,464.67	1,440.93	23.74	61.691				
3,800.00	3,708.00	3,307.69	3,057.01	14.51	13.31	-119.47	1,003.84	463.94	1,519.99	1,495.58	24.42	62.256				

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 203H
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 203H	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 201H - 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)			
3,900.00	3,804.59	3,390.97	3,129.43	14.92	13.70	-119.39	1,040.76	482.06	1,575.31	1,550.22	25.09	62.789	
4,000.00	3,901.18	3,474.26	3,201.85	15.33	14.09	-119.31	1,077.67	500.19	1,630.64	1,604.87	25.76	63.292	
4,100.00	3,997.78	3,557.54	3,274.27	15.74	14.48	-119.23	1,114.58	518.31	1,685.96	1,659.52	26.44	63.767	
4,200.00	4,094.37	3,640.82	3,346.69	16.15	14.87	-119.16	1,151.50	536.44	1,741.29	1,714.17	27.12	64.217	
4,300.00	4,190.96	3,724.10	3,419.11	16.55	15.27	-119.10	1,188.41	554.56	1,796.62	1,768.82	27.79	64.642	
4,400.00	4,287.56	3,807.39	3,491.53	16.96	15.66	-119.04	1,225.33	572.69	1,851.95	1,823.48	28.47	65.046	
4,500.00	4,384.15	3,890.67	3,563.95	17.37	16.05	-118.98	1,262.24	590.82	1,907.28	1,878.13	29.15	65.430	
4,600.00	4,480.74	3,973.95	3,636.37	17.78	16.44	-118.92	1,299.15	608.94	1,962.61	1,932.78	29.83	65.794	
4,700.00	4,577.34	4,057.23	3,708.79	18.19	16.84	-118.87	1,336.07	627.07	2,017.95	1,987.44	30.51	66.141	
4,800.00	4,673.93	4,140.51	3,781.21	18.60	17.23	-118.82	1,372.98	645.19	2,073.28	2,042.09	31.19	66.471	
4,900.00	4,770.52	4,223.80	3,853.63	19.01	17.63	-118.78	1,409.90	663.32	2,128.62	2,096.75	31.87	66.786	
5,000.00	4,867.12	4,307.08	3,926.05	19.42	18.02	-118.73	1,446.81	681.44	2,183.96	2,151.40	32.55	67.086	
5,100.00	4,963.71	4,390.36	3,998.47	19.83	18.41	-118.69	1,483.72	699.57	2,239.29	2,206.06	33.24	67.373	
5,200.00	5,060.30	4,473.64	4,070.89	20.24	18.81	-118.65	1,520.64	717.69	2,294.63	2,260.71	33.92	67.647	
5,300.00	5,156.90	4,556.92	4,143.31	20.65	19.20	-118.61	1,557.55	735.82	2,349.97	2,315.37	34.60	67.909	
5,400.00	5,253.49	4,640.21	4,215.73	21.06	19.60	-118.58	1,594.47	753.94	2,405.31	2,370.02	35.29	68.160	
5,500.00	5,350.08	4,723.49	4,288.15	21.47	20.00	-118.54	1,631.38	772.07	2,460.65	2,424.68	35.97	68.400	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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		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	30.10	0.30	30.10				
100.00	100.00	100.00	100.00	0.25	0.25	0.57	30.10	0.30	30.10	29.60	0.50	59.980	
200.00	200.00	200.00	200.00	0.61	0.61	0.57	30.10	0.30	30.10	28.88	1.22	24.698	
300.00	300.00	300.00	300.00	0.97	0.97	0.57	30.10	0.30	30.10	28.17	1.94	15.550	
400.00	400.00	400.00	400.00	1.33	1.33	0.57	30.10	0.30	30.10	27.45	2.65	11.348	
500.00	500.00	500.00	500.00	1.68	1.68	0.57	30.10	0.30	30.10	26.73	3.37	8.933	
600.00	600.00	600.00	600.00	2.04	2.04	0.57	30.10	0.30	30.10	26.01	4.09	7.366 CC, ES	
700.00	699.98	699.33	699.31	2.39	2.40	-119.02	31.13	1.68	31.99	27.21	4.79	6.685	
800.00	799.84	798.45	798.29	2.73	2.75	-119.57	34.21	5.80	37.67	32.19	5.48	6.879	
900.00	899.45	897.14	896.61	3.08	3.10	-120.18	39.32	12.63	47.11	40.94	6.17	7.635	
1,000.00	998.70	995.21	993.95	3.42	3.45	-120.66	46.39	22.10	60.29	53.42	6.87	8.782	
1,100.00	1,097.47	1,092.45	1,090.02	3.78	3.80	-120.98	55.38	34.12	77.16	69.60	7.56	10.207	
1,200.00	1,195.62	1,188.67	1,184.54	4.14	4.15	-121.14	66.18	48.58	97.68	89.43	8.25	11.835	
1,300.00	1,293.06	1,283.71	1,277.24	4.51	4.50	-121.19	78.71	65.34	121.78	112.83	8.94	13.614	
1,349.92	1,341.38	1,330.66	1,322.76	4.70	4.67	-121.17	85.58	74.53	135.12	125.83	9.29	14.544	
1,400.00	1,389.76	1,377.46	1,367.95	4.89	4.84	-121.24	92.87	84.29	149.16	139.53	9.63	15.483	
1,500.00	1,486.35	1,471.99	1,458.75	5.27	5.20	-120.84	108.63	105.37	178.18	167.85	10.33	17.246	
1,600.00	1,582.95	1,567.64	1,550.53	5.66	5.56	-120.48	124.73	126.91	207.36	196.31	11.05	18.768	
1,700.00	1,679.54	1,663.28	1,642.31	6.05	5.93	-120.21	140.83	148.45	236.54	224.77	11.77	20.095	
1,800.00	1,776.13	1,758.92	1,734.09	6.44	6.29	-120.00	156.93	169.99	265.73	253.23	12.50	21.260	
1,900.00	1,872.73	1,854.56	1,825.88	6.83	6.67	-119.83	173.03	191.54	294.92	281.69	13.23	22.291	
2,000.00	1,969.32	1,950.20	1,917.66	7.23	7.04	-119.69	189.12	213.08	324.12	310.15	13.97	23.209	
2,100.00	2,065.91	2,045.84	2,009.44	7.63	7.41	-119.58	205.22	234.62	353.31	338.61	14.70	24.030	
2,200.00	2,162.50	2,141.48	2,101.23	8.03	7.79	-119.48	221.32	256.16	382.51	367.06	15.44	24.769	
2,300.00	2,259.10	2,237.13	2,193.01	8.43	8.17	-119.40	237.42	277.70	411.70	395.52	16.19	25.437	
2,400.00	2,355.69	2,332.77	2,284.79	8.83	8.54	-119.32	253.52	299.24	440.90	423.97	16.93	26.044	
2,500.00	2,452.28	2,428.41	2,376.57	9.23	8.92	-119.26	269.62	320.78	470.10	452.42	17.67	26.598	
2,600.00	2,548.88	2,524.05	2,468.36	9.64	9.30	-119.20	285.72	342.32	499.30	480.88	18.42	27.104	
2,700.00	2,645.47	2,619.69	2,560.14	10.04	9.68	-119.15	301.82	363.86	528.50	509.33	19.17	27.570	
2,800.00	2,742.06	2,715.33	2,651.92	10.44	10.06	-119.11	317.92	385.40	557.69	537.78	19.92	27.999	
2,900.00	2,838.66	2,810.97	2,743.70	10.85	10.44	-119.07	334.02	406.94	586.89	566.22	20.67	28.395	
3,000.00	2,935.25	2,906.61	2,835.49	11.26	10.82	-119.03	350.12	428.49	616.09	594.67	21.42	28.762	
3,100.00	3,031.84	3,002.26	2,927.27	11.66	11.21	-119.00	366.22	450.03	645.29	623.12	22.17	29.104	
3,200.00	3,128.44	3,097.90	3,019.05	12.07	11.59	-118.97	382.31	471.57	674.49	651.57	22.92	29.422	
3,300.00	3,225.03	3,193.54	3,110.83	12.47	11.97	-118.94	398.41	493.11	703.69	680.01	23.68	29.719	
3,400.00	3,321.62	3,289.18	3,202.62	12.88	12.36	-118.91	414.51	514.65	732.89	708.46	24.43	29.998	
3,500.00	3,418.22	3,384.82	3,294.40	13.29	12.74	-118.89	430.61	536.19	762.09	736.91	25.19	30.258	
3,600.00	3,514.81	3,480.46	3,386.18	13.70	13.12	-118.87	446.71	557.73	791.29	765.35	25.94	30.503	
3,700.00	3,611.40	3,576.10	3,477.97	14.10	13.51	-118.85	462.81	579.27	820.49	793.80	26.70	30.734	
3,800.00	3,708.00	3,671.74	3,569.75	14.51	13.89	-118.83	478.91	600.81	849.69	822.24	27.45	30.951	
3,900.00	3,804.59	3,767.39	3,661.53	14.92	14.27	-118.81	495.01	622.35	878.90	850.69	28.21	31.157	
4,000.00	3,901.18	3,863.03	3,753.31	15.33	14.66	-118.80	511.11	643.90	908.10	879.13	28.97	31.351	
4,100.00	3,997.78	3,958.67	3,845.10	15.74	15.04	-118.78	527.21	665.44	937.30	907.57	29.72	31.535	
4,200.00	4,094.37	4,054.31	3,936.88	16.15	15.43	-118.77	543.31	686.98	966.50	936.02	30.48	31.709	
4,300.00	4,190.96	4,149.95	4,028.66	16.55	15.81	-118.75	559.41	708.52	995.70	964.46	31.24	31.875	
4,400.00	4,287.56	4,245.59	4,120.44	16.96	16.20	-118.74	575.50	730.06	1,024.90	992.90	32.00	32.032	
4,500.00	4,384.15	4,341.23	4,212.23	17.37	16.58	-118.73	591.60	751.60	1,054.10	1,021.35	32.75	32.182	
4,600.00	4,480.74	4,436.87	4,304.01	17.78	16.97	-118.72	607.70	773.14	1,083.30	1,049.79	33.51	32.325	
4,700.00	4,577.34	4,532.52	4,395.79	18.19	17.35	-118.70	623.80	794.68	1,112.50	1,078.23	34.27	32.461	
4,800.00	4,673.93	4,628.16	4,487.58	18.60	17.74	-118.69	639.90	816.22	1,141.70	1,106.67	35.03	32.591	
4,900.00	4,770.52	4,723.80	4,579.36	19.01	18.12	-118.68	656.00	837.76	1,170.90	1,135.11	35.79	32.716	
5,000.00	4,867.12	4,819.44	4,671.14	19.42	18.51	-118.67	672.10	859.30	1,200.11	1,163.56	36.55	32.835	

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 203H
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 203H	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:												Warning	
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	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.00	4,963.71	4,915.08	4,762.92	19.83	18.90	-118.67	688.20	880.85	1,229.31	1,192.00	37.31	32.949	
5,200.00	5,060.30	5,010.72	4,854.71	20.24	19.28	-118.66	704.30	902.39	1,258.51	1,220.44	38.07	33.058	
5,300.00	5,156.90	5,106.36	4,946.49	20.65	19.67	-118.65	720.40	923.93	1,287.71	1,248.88	38.83	33.163	
5,400.00	5,253.49	5,202.01	5,038.27	21.06	20.05	-118.64	736.50	945.47	1,316.91	1,277.32	39.59	33.263	
5,500.00	5,350.08	5,297.65	5,130.05	21.47	20.44	-118.63	752.60	967.01	1,346.11	1,305.76	40.35	33.360	
5,600.00	5,446.68	5,393.29	5,221.84	21.88	20.83	-118.63	768.69	988.55	1,375.31	1,334.20	41.11	33.453	
5,612.36	5,458.62	5,405.11	5,233.18	21.93	20.87	-118.63	770.68	991.21	1,378.92	1,337.72	41.21	33.464	
5,700.00	5,543.60	5,489.10	5,313.78	22.28	21.21	-119.03	784.82	1,010.13	1,403.90	1,362.03	41.87	33.529	
5,800.00	5,641.32	5,585.29	5,406.10	22.68	21.60	-119.33	801.01	1,031.79	1,430.87	1,388.25	42.62	33.570	
5,900.00	5,739.72	5,683.60	5,500.44	23.06	22.00	-119.49	817.56	1,053.93	1,456.22	1,412.84	43.38	33.566	
6,000.00	5,838.69	5,822.95	5,635.14	23.43	22.55	-119.42	838.88	1,082.47	1,478.44	1,434.01	44.43	33.275	
6,100.00	5,938.09	5,965.00	5,774.07	23.79	23.09	-119.32	856.56	1,106.12	1,496.17	1,450.73	45.44	32.926	
6,200.00	6,037.81	6,109.25	5,916.48	24.13	23.62	-119.20	870.27	1,124.46	1,509.31	1,462.90	46.40	32.526	
6,300.00	6,137.73	6,255.15	6,061.51	24.46	24.13	-119.06	879.76	1,137.15	1,517.75	1,470.44	47.31	32.083	
6,362.28	6,200.00	6,346.59	6,152.73	24.66	24.44	0.40	883.44	1,142.08	1,520.61	1,472.78	47.84	31.788	
6,400.00	6,237.72	6,402.12	6,208.21	24.78	24.63	0.46	884.83	1,143.94	1,521.57	1,473.42	48.14	31.605	
6,500.00	6,337.72	6,531.64	6,337.72	25.08	25.04	0.51	885.71	1,145.12	1,522.17	1,473.30	48.87	31.146	
6,600.00	6,437.72	6,631.64	6,437.72	25.38	25.36	0.51	885.71	1,145.12	1,522.17	1,472.66	49.51	30.744	
6,700.00	6,537.72	6,731.64	6,537.72	25.69	25.68	0.51	885.71	1,145.12	1,522.17	1,472.02	50.15	30.351	
6,703.19	6,540.91	6,734.83	6,540.91	25.70	25.69	0.51	885.71	1,145.12	1,522.17	1,472.00	50.17	30.339	
6,731.88	6,569.60	6,763.14	6,569.22	25.79	25.78	0.50	885.71	1,144.95	1,522.17	1,471.82	50.35	30.230	
6,750.00	6,587.72	6,780.72	6,586.78	25.84	25.84	89.66	885.73	1,144.16	1,522.18	1,471.71	50.46	30.164	
6,775.00	6,612.66	6,804.94	6,610.90	25.91	25.91	89.63	885.77	1,142.02	1,522.19	1,471.58	50.61	30.079	
6,800.00	6,637.49	6,829.14	6,634.86	25.98	25.97	89.61	885.83	1,138.66	1,522.21	1,471.46	50.74	29.998	
6,825.00	6,662.13	6,853.30	6,658.59	26.05	26.04	89.59	885.91	1,134.10	1,522.23	1,471.35	50.88	29.919	
6,850.00	6,686.52	6,877.45	6,682.03	26.11	26.10	89.57	886.02	1,128.35	1,522.25	1,471.25	51.01	29.844	
6,875.00	6,710.59	6,901.57	6,705.14	26.17	26.16	89.55	886.14	1,121.42	1,522.28	1,471.15	51.13	29.771	
6,900.00	6,734.27	6,925.67	6,727.85	26.23	26.22	89.53	886.29	1,113.35	1,522.32	1,471.07	51.25	29.702	
6,925.00	6,757.50	6,950.00	6,750.32	26.29	26.28	89.51	886.46	1,104.05	1,522.36	1,470.99	51.37	29.635	
6,950.00	6,780.21	6,973.83	6,771.85	26.34	26.33	89.50	886.64	1,093.85	1,522.40	1,470.92	51.48	29.571	
6,975.00	6,802.35	6,997.89	6,793.04	26.39	26.38	89.48	886.85	1,082.46	1,522.45	1,470.86	51.59	29.510	
7,000.00	6,823.85	7,021.93	6,813.63	26.44	26.43	89.47	887.08	1,070.04	1,522.50	1,470.80	51.70	29.451	
7,025.00	6,844.65	7,045.97	6,833.55	26.49	26.48	89.46	887.32	1,056.59	1,522.55	1,470.76	51.80	29.395	
7,050.00	6,864.70	7,070.01	6,852.77	26.53	26.53	89.45	887.59	1,042.17	1,522.61	1,470.72	51.89	29.341	
7,075.00	6,883.94	7,094.04	6,871.23	26.58	26.57	89.44	887.87	1,026.80	1,522.67	1,470.69	51.99	29.289	
7,100.00	6,902.32	7,118.07	6,888.90	26.62	26.61	89.43	888.16	1,010.51	1,522.74	1,470.66	52.08	29.239	
7,125.00	6,919.79	7,142.10	6,905.73	26.65	26.64	89.42	888.48	993.37	1,522.80	1,470.64	52.17	29.191	
7,150.00	6,936.29	7,166.13	6,921.67	26.69	26.68	89.42	888.80	975.39	1,522.87	1,470.62	52.25	29.145	
7,175.00	6,951.79	7,190.17	6,936.70	26.72	26.71	89.42	889.15	956.63	1,522.95	1,470.61	52.33	29.101	
7,200.00	6,966.25	7,214.22	6,950.76	26.75	26.74	89.42	889.50	937.13	1,523.02	1,470.61	52.41	29.058	
7,225.00	6,979.61	7,238.28	6,963.83	26.78	26.77	89.42	889.87	916.93	1,523.10	1,470.61	52.49	29.017	
7,250.00	6,991.86	7,262.35	6,975.87	26.81	26.80	89.42	890.25	896.10	1,523.18	1,470.61	52.56	28.978	
7,275.00	7,002.94	7,286.44	6,986.86	26.84	26.83	89.42	890.64	874.67	1,523.26	1,470.62	52.63	28.941	
7,300.00	7,012.84	7,310.55	6,996.76	26.86	26.85	89.42	891.04	852.69	1,523.34	1,470.64	52.70	28.905	
7,325.00	7,021.52	7,334.67	7,005.54	26.88	26.87	89.43	891.45	830.23	1,523.43	1,470.66	52.77	28.871	
7,350.00	7,028.97	7,358.82	7,013.18	26.90	26.89	89.44	891.87	807.33	1,523.51	1,470.68	52.83	28.839	
7,375.00	7,035.15	7,382.99	7,019.66	26.92	26.91	89.45	892.29	784.05	1,523.60	1,470.71	52.89	28.809	
7,400.00	7,040.06	7,407.19	7,024.96	26.94	26.92	89.46	892.72	760.44	1,523.68	1,470.74	52.94	28.781	
7,425.00	7,043.68	7,431.41	7,029.06	26.95	26.93	89.47	893.16	736.57	1,523.77	1,470.78	52.99	28.755	
7,450.00	7,046.00	7,455.67	7,031.94	26.96	26.95	89.48	893.60	712.50	1,523.86	1,470.82	53.04	28.731	
7,475.00	7,047.01	7,479.96	7,033.61	26.97	26.95	89.50	894.04	688.27	1,523.95	1,470.87	53.08	28.710	
7,489.85	7,047.00	7,494.40	7,034.01	26.98	26.96	89.51	894.30	673.84	1,524.00	1,470.90	53.10	28.699	

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 203H
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 203H	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		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)			
7,500.00	7,046.83	7,504.29	7,034.03	26.98	26.96	89.52	894.48	663.95	1,524.04	1,470.92	53.12	28.691	
7,600.00	7,045.16	7,604.20	7,032.62	27.05	27.02	89.52	896.31	564.06	1,524.41	1,471.07	53.34	28.578	
7,700.00	7,043.49	7,704.20	7,031.19	27.15	27.12	89.53	898.13	464.09	1,524.79	1,471.13	53.66	28.416	
7,800.00	7,041.82	7,804.20	7,029.76	27.31	27.26	89.54	899.95	364.12	1,525.17	1,471.10	54.07	28.208	
7,900.00	7,040.15	7,904.20	7,028.34	27.51	27.47	89.55	901.77	264.15	1,525.55	1,470.98	54.57	27.958	
8,000.00	7,038.48	8,004.20	7,026.91	27.76	27.72	89.56	903.60	164.17	1,525.92	1,470.77	55.15	27.667	
8,100.00	7,036.81	8,104.20	7,025.48	28.06	28.02	89.57	905.42	64.20	1,526.30	1,470.48	55.82	27.341	
8,200.00	7,035.14	8,204.20	7,024.05	28.40	28.37	89.58	907.24	-35.77	1,526.68	1,470.10	56.58	26.984	
8,300.00	7,033.48	8,304.20	7,022.63	28.79	28.77	89.59	909.07	-135.74	1,527.06	1,469.65	57.41	26.599	
8,400.00	7,031.81	8,404.20	7,021.20	29.22	29.20	89.60	910.89	-235.71	1,527.44	1,469.12	58.32	26.192	
8,500.00	7,030.14	8,504.20	7,019.77	29.70	29.68	89.61	912.71	-335.69	1,527.81	1,468.52	59.30	25.765	
8,600.00	7,028.47	8,604.19	7,018.35	30.21	30.20	89.62	914.54	-435.66	1,528.19	1,467.85	60.34	25.324	
8,700.00	7,026.80	8,704.19	7,016.92	30.75	30.75	89.63	916.36	-535.63	1,528.57	1,467.11	61.46	24.872	
8,800.00	7,025.13	8,804.19	7,015.49	31.33	31.33	89.64	918.18	-635.60	1,528.95	1,466.32	62.63	24.412	
8,900.00	7,023.46	8,904.19	7,014.06	31.94	31.94	89.64	920.00	-735.58	1,529.32	1,465.46	63.86	23.947	
9,000.00	7,021.79	9,004.19	7,012.64	32.58	32.58	89.65	921.83	-835.55	1,529.70	1,464.55	65.15	23.480	
9,100.00	7,020.12	9,104.19	7,011.21	33.25	33.25	89.66	923.65	-935.52	1,530.08	1,463.59	66.49	23.013	
9,200.00	7,018.45	9,204.19	7,009.78	33.94	33.94	89.67	925.47	-1,035.49	1,530.46	1,462.58	67.88	22.548	
9,300.00	7,016.78	9,304.19	7,008.36	34.66	34.65	89.68	927.30	-1,135.46	1,530.84	1,461.53	69.31	22.088	
9,400.00	7,015.11	9,404.19	7,006.93	35.39	35.39	89.69	929.12	-1,235.44	1,531.21	1,460.43	70.78	21.633	
9,500.00	7,013.45	9,504.19	7,005.50	36.15	36.15	89.69	930.94	-1,335.41	1,531.59	1,459.29	72.30	21.184	
9,600.00	7,011.78	9,604.18	7,004.07	36.93	36.92	89.71	932.76	-1,435.38	1,531.97	1,458.12	73.85	20.744	
9,700.00	7,010.11	9,704.18	7,002.65	37.72	37.72	89.72	934.59	-1,535.35	1,532.35	1,456.91	75.44	20.312	
9,800.00	7,008.44	9,804.18	7,001.22	38.54	38.53	89.73	936.41	-1,635.33	1,532.73	1,455.67	77.06	19.890	
9,900.00	7,006.77	9,904.18	6,999.79	39.36	39.35	89.74	938.23	-1,735.30	1,533.11	1,454.39	78.71	19.477	
10,000.00	7,005.10	10,004.18	6,998.37	40.20	40.19	89.74	940.06	-1,835.27	1,533.48	1,453.09	80.40	19.074	
10,100.00	7,003.43	10,104.18	6,996.94	41.06	41.05	89.75	941.88	-1,935.24	1,533.86	1,451.76	82.11	18.681	
10,200.00	7,001.76	10,204.18	6,995.51	41.93	41.91	89.76	943.70	-2,035.21	1,534.24	1,450.40	83.84	18.299	
10,300.00	7,000.09	10,304.18	6,994.08	42.81	42.79	89.77	945.53	-2,135.19	1,534.62	1,449.02	85.60	17.928	
10,400.00	6,998.42	10,404.18	6,992.66	43.70	43.68	89.78	947.35	-2,235.16	1,535.00	1,447.61	87.38	17.566	
10,500.00	6,996.75	10,504.18	6,991.23	44.61	44.59	89.79	949.17	-2,335.13	1,535.38	1,446.19	89.19	17.215	
10,600.00	6,995.08	10,604.17	6,989.80	45.52	45.50	89.80	950.99	-2,435.10	1,535.76	1,444.74	91.01	16.874	
10,700.00	6,993.42	10,704.17	6,988.38	46.44	46.42	89.81	952.82	-2,535.07	1,536.13	1,443.28	92.85	16.544	
10,800.00	6,991.75	10,804.17	6,986.95	47.37	47.35	89.82	954.64	-2,635.05	1,536.51	1,441.80	94.71	16.223	
10,900.00	6,990.08	10,904.17	6,985.52	48.31	48.29	89.83	956.46	-2,735.02	1,536.89	1,440.30	96.59	15.911	
11,000.00	6,988.41	11,004.17	6,984.09	49.26	49.23	89.84	958.29	-2,834.99	1,537.27	1,438.79	98.48	15.609	
11,100.00	6,986.74	11,104.17	6,982.67	50.22	50.19	89.84	960.11	-2,934.96	1,537.65	1,437.26	100.39	15.316	
11,200.00	6,985.07	11,204.17	6,981.24	51.18	51.15	89.85	961.93	-3,034.94	1,538.03	1,435.71	102.31	15.032	
11,300.00	6,983.40	11,304.17	6,979.81	52.15	52.11	89.86	963.76	-3,134.91	1,538.41	1,434.16	104.25	14.757	
11,400.00	6,981.73	11,404.17	6,978.39	53.12	53.09	89.87	965.58	-3,234.88	1,538.79	1,432.59	106.20	14.490	
11,500.00	6,980.06	11,504.17	6,976.96	54.10	54.07	89.88	967.40	-3,334.85	1,539.16	1,431.01	108.16	14.231	
11,600.00	6,978.39	11,604.16	6,975.53	55.09	55.05	89.89	969.22	-3,434.82	1,539.54	1,429.41	110.13	13.980	
11,700.00	6,976.72	11,704.16	6,974.10	56.08	56.04	89.90	971.05	-3,534.80	1,539.92	1,427.81	112.11	13.736	
11,800.00	6,975.06	11,804.16	6,972.68	57.08	57.04	89.91	972.87	-3,634.77	1,540.30	1,426.20	114.10	13.499	
11,900.00	6,973.39	11,904.16	6,971.25	58.08	58.04	89.92	974.69	-3,734.74	1,540.68	1,424.58	116.10	13.270	
12,000.00	6,971.72	12,004.16	6,969.82	59.09	59.04	89.93	976.52	-3,834.71	1,541.06	1,422.94	118.11	13.047	
12,100.00	6,970.05	12,104.16	6,968.40	60.10	60.05	89.93	978.34	-3,934.69	1,541.44	1,421.30	120.13	12.831	
12,200.00	6,968.38	12,204.16	6,966.97	61.11	61.07	89.94	980.16	-4,034.66	1,541.82	1,419.66	122.16	12.621	
12,300.00	6,966.71	12,304.16	6,965.54	62.13	62.08	89.95	981.99	-4,134.63	1,542.20	1,418.00	124.20	12.417	
12,400.00	6,965.04	12,404.16	6,964.11	63.15	63.11	89.96	983.81	-4,234.60	1,542.58	1,416.34	126.24	12.220	
12,500.00	6,963.37	12,504.16	6,962.69	64.18	64.13	89.97	985.63	-4,334.57	1,542.96	1,414.67	128.29	12.027	
12,600.00	6,961.70	12,604.15	6,961.26	65.21	65.16	89.98	987.45	-4,434.55	1,543.33	1,412.99	130.35	11.840	

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 203H
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 203H	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)			
12,700.00	6,960.03	12,704.15	6,959.83	66.24	66.19	89.99	989.28	-4,534.52	1,543.71	1,411.31	132.41	11.659	
12,800.00	6,958.36	12,804.15	6,958.41	67.27	67.22	90.00	991.10	-4,634.49	1,544.09	1,409.62	134.48	11.482	
12,900.00	6,956.69	12,904.15	6,956.98	68.31	68.26	90.01	992.92	-4,734.46	1,544.47	1,407.92	136.55	11.311	
13,000.00	6,955.03	13,004.15	6,955.55	69.35	69.30	90.02	994.75	-4,834.44	1,544.85	1,406.22	138.63	11.144	
13,100.00	6,953.36	13,104.15	6,954.12	70.40	70.34	90.02	996.57	-4,934.41	1,545.23	1,404.51	140.72	10.981	
13,200.00	6,951.69	13,204.15	6,952.70	71.44	71.39	90.03	998.39	-5,034.38	1,545.61	1,402.80	142.81	10.823	
13,300.00	6,950.02	13,304.15	6,951.27	72.49	72.44	90.04	1,000.22	-5,134.35	1,545.99	1,401.09	144.91	10.669	
13,400.00	6,948.35	13,404.15	6,949.84	73.54	73.49	90.05	1,002.04	-5,234.32	1,546.37	1,399.36	147.01	10.519	
13,500.00	6,946.68	13,504.14	6,948.42	74.60	74.54	90.06	1,003.86	-5,334.30	1,546.75	1,397.64	149.11	10.373	
13,600.00	6,945.01	13,604.14	6,946.99	75.65	75.59	90.07	1,005.68	-5,434.27	1,547.13	1,395.91	151.22	10.231	
13,700.00	6,943.34	13,704.14	6,945.56	76.71	76.65	90.08	1,007.51	-5,534.24	1,547.51	1,394.18	153.33	10.092	
13,800.00	6,941.67	13,804.14	6,944.13	77.77	77.71	90.09	1,009.33	-5,634.21	1,547.89	1,392.44	155.45	9.957	
13,900.00	6,940.00	13,904.14	6,942.71	78.83	78.77	90.10	1,011.15	-5,734.18	1,548.27	1,390.70	157.57	9.826	
14,000.00	6,938.33	14,004.14	6,941.28	79.89	79.83	90.11	1,012.98	-5,834.16	1,548.65	1,388.95	159.70	9.697	
14,100.00	6,936.67	14,104.14	6,939.85	80.96	80.90	90.11	1,014.80	-5,934.13	1,549.03	1,387.20	161.82	9.572	
14,200.00	6,935.00	14,204.14	6,938.43	82.02	81.96	90.12	1,016.62	-6,034.10	1,549.41	1,385.45	163.96	9.450	
14,300.00	6,933.33	14,304.14	6,937.00	83.09	83.03	90.13	1,018.45	-6,134.07	1,549.79	1,383.70	166.09	9.331	
14,400.00	6,931.66	14,404.14	6,935.57	84.16	84.10	90.14	1,020.27	-6,234.05	1,550.17	1,381.94	168.23	9.215	
14,500.00	6,929.99	14,504.13	6,934.14	85.23	85.17	90.15	1,022.09	-6,334.02	1,550.55	1,380.18	170.37	9.101	
14,600.00	6,928.32	14,604.13	6,932.72	86.30	86.24	90.16	1,023.91	-6,433.99	1,550.93	1,378.42	172.51	8.990	
14,700.00	6,926.65	14,704.13	6,931.29	87.38	87.31	90.17	1,025.74	-6,533.96	1,551.31	1,376.65	174.66	8.882	
14,800.00	6,924.98	14,804.13	6,929.86	88.45	88.39	90.18	1,027.56	-6,633.93	1,551.69	1,374.88	176.81	8.776	
14,900.00	6,923.31	14,904.13	6,928.44	89.53	89.46	90.19	1,029.38	-6,733.91	1,552.07	1,373.11	178.96	8.673	
15,000.00	6,921.64	15,004.13	6,927.01	90.61	90.54	90.19	1,031.21	-6,833.88	1,552.45	1,371.33	181.12	8.572	
15,100.00	6,919.97	15,104.13	6,925.58	91.69	91.62	90.20	1,033.03	-6,933.85	1,552.83	1,369.56	183.27	8.473	
15,200.00	6,918.30	15,204.13	6,924.15	92.77	92.70	90.21	1,034.85	-7,033.82	1,553.21	1,367.78	185.43	8.376	
15,300.00	6,916.64	15,304.13	6,922.73	93.85	93.78	90.22	1,036.67	-7,133.80	1,553.59	1,366.00	187.59	8.282	
15,400.00	6,914.97	15,404.13	6,921.30	94.93	94.86	90.23	1,038.50	-7,233.77	1,553.97	1,364.22	189.76	8.189	
15,500.00	6,913.30	15,504.12	6,919.87	96.01	95.94	90.24	1,040.32	-7,333.74	1,554.35	1,362.43	191.92	8.099	
15,600.00	6,911.63	15,604.12	6,918.45	97.10	97.03	90.25	1,042.14	-7,433.71	1,554.73	1,360.64	194.09	8.010	
15,700.00	6,909.96	15,704.12	6,917.02	98.18	98.11	90.26	1,043.97	-7,533.68	1,555.11	1,358.85	196.26	7.924	
15,800.00	6,908.29	15,804.12	6,915.59	99.27	99.20	90.27	1,045.79	-7,633.66	1,555.49	1,357.06	198.43	7.839	
15,900.00	6,906.62	15,904.12	6,914.17	100.36	100.28	90.27	1,047.61	-7,733.63	1,555.87	1,355.27	200.60	7.756	
16,000.00	6,904.95	16,004.12	6,912.74	101.44	101.37	90.28	1,049.44	-7,833.60	1,556.25	1,353.48	202.78	7.675	
16,100.00	6,903.28	16,104.12	6,911.31	102.53	102.46	90.29	1,051.26	-7,933.57	1,556.64	1,351.68	204.95	7.595	
16,200.00	6,901.61	16,204.12	6,909.88	103.62	103.55	90.30	1,053.08	-8,033.55	1,557.02	1,349.88	207.13	7.517	
16,300.00	6,899.94	16,304.12	6,908.46	104.71	104.64	90.31	1,054.90	-8,133.52	1,557.40	1,348.09	209.31	7.441	
16,400.00	6,898.28	16,404.12	6,907.03	105.80	105.73	90.32	1,056.73	-8,233.49	1,557.78	1,346.28	211.49	7.366	
16,500.00	6,896.61	16,504.11	6,905.60	106.89	106.82	90.33	1,058.55	-8,333.46	1,558.16	1,344.48	213.68	7.292	
16,600.00	6,894.94	16,604.11	6,904.18	107.99	107.91	90.34	1,060.37	-8,433.43	1,558.54	1,342.68	215.86	7.220	
16,700.00	6,893.27	16,704.11	6,902.75	109.08	109.01	90.34	1,062.20	-8,533.41	1,558.92	1,340.87	218.04	7.150	
16,800.00	6,891.60	16,804.11	6,901.32	110.17	110.10	90.35	1,064.02	-8,633.38	1,559.30	1,339.07	220.23	7.080	
16,900.00	6,889.93	16,904.11	6,899.89	111.27	111.20	90.36	1,065.84	-8,733.35	1,559.68	1,337.26	222.42	7.012	
17,000.00	6,888.26	17,004.11	6,898.47	112.36	112.29	90.37	1,067.67	-8,833.32	1,560.06	1,335.45	224.61	6.946	
17,100.00	6,886.59	17,104.11	6,897.04	113.46	113.39	90.38	1,069.49	-8,933.29	1,560.44	1,333.64	226.80	6.880	
17,200.00	6,884.92	17,204.11	6,895.61	114.56	114.48	90.39	1,071.31	-9,033.27	1,560.82	1,331.83	228.99	6.816	
17,300.00	6,883.25	17,304.11	6,894.19	115.65	115.58	90.40	1,073.13	-9,133.24	1,561.21	1,330.02	231.19	6.753	
17,400.00	6,881.58	17,404.11	6,892.76	116.75	116.68	90.41	1,074.96	-9,233.21	1,561.59	1,328.21	233.38	6.691	
17,500.00	6,879.91	17,504.10	6,891.33	117.85	117.77	90.42	1,076.78	-9,333.18	1,561.97	1,326.39	235.58	6.630	
17,600.00	6,878.25	17,604.10	6,889.90	118.95	118.87	90.42	1,078.60	-9,433.16	1,562.35	1,324.58	237.77	6.571	
17,700.00	6,876.58	17,704.10	6,888.48	120.05	119.97	90.43	1,080.43	-9,533.13	1,562.73	1,322.76	239.97	6.512	
17,800.00	6,874.91	17,804.10	6,887.05	121.15	121.07	90.44	1,082.25	-9,633.10	1,563.11	1,320.94	242.17	6.455	

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 203H
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 203H	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		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		
17,854.35	6,874.00	17,858.45	6,886.27	121.75	121.67	90.45	1,083.24	-9,687.44	1,563.32	1,319.96	243.36	6.424	SF	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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	-179.43	-29.90	-0.30	29.90				
100.00	100.00	100.00	100.00	0.25	0.25	-179.43	-29.90	-0.30	29.90	29.40	0.50	59.581	
200.00	200.00	200.00	200.00	0.61	0.61	-179.43	-29.90	-0.30	29.90	28.68	1.22	24.533	
300.00	300.00	300.00	300.00	0.97	0.97	-179.43	-29.90	-0.30	29.90	27.97	1.94	15.447	
400.00	400.00	400.00	400.00	1.33	1.33	-179.43	-29.90	-0.30	29.90	27.25	2.65	11.272	
500.00	500.00	500.00	500.00	1.68	1.68	-179.43	-29.90	-0.30	29.90	26.53	3.37	8.874	
600.00	600.00	600.00	600.00	2.04	2.04	-179.43	-29.90	-0.30	29.90	25.81	4.09	7.317 CC, ES	
700.00	699.98	698.85	698.82	2.39	2.38	62.12	-31.78	0.70	30.96	26.19	4.77	6.491	
800.00	799.84	797.58	797.34	2.73	2.71	64.47	-37.42	3.68	34.18	28.75	5.43	6.293	
900.00	899.45	896.09	895.27	3.08	3.05	67.52	-46.78	8.64	39.63	33.53	6.10	6.499	
1,000.00	998.70	994.27	992.33	3.42	3.39	70.56	-59.80	15.53	47.39	40.62	6.77	7.001	
1,100.00	1,097.47	1,092.02	1,088.25	3.78	3.73	73.21	-76.39	24.32	57.46	50.02	7.44	7.720	
1,200.00	1,195.62	1,189.22	1,182.75	4.14	4.09	75.35	-96.47	34.95	69.84	61.72	8.12	8.596	
1,300.00	1,293.06	1,285.80	1,275.61	4.51	4.45	77.02	-119.90	47.36	84.48	75.67	8.81	9.587	
1,349.92	1,341.38	1,333.75	1,321.27	4.70	4.63	77.70	-132.82	54.20	92.62	83.46	9.15	10.118	
1,400.00	1,389.76	1,381.65	1,366.58	4.89	4.82	78.22	-146.56	61.48	101.42	91.92	9.50	10.675	
1,500.00	1,486.35	1,476.54	1,455.33	5.27	5.20	77.97	-176.24	77.20	121.09	110.91	10.18	11.891	
1,600.00	1,582.95	1,570.18	1,541.47	5.66	5.59	76.64	-208.68	94.38	143.56	132.71	10.85	13.236	
1,700.00	1,679.54	1,662.95	1,625.27	6.05	5.98	74.75	-243.83	112.99	168.90	157.41	11.50	14.693	
1,800.00	1,776.13	1,759.22	1,711.61	6.44	6.41	73.00	-281.45	132.91	195.45	183.24	12.22	15.999	
1,900.00	1,872.73	1,855.48	1,797.95	6.83	6.85	71.67	-319.07	152.84	222.13	209.19	12.95	17.156	
2,000.00	1,969.32	1,951.74	1,884.28	7.23	7.29	70.62	-356.69	172.76	248.90	235.22	13.69	18.186	
2,100.00	2,065.91	2,048.00	1,970.62	7.63	7.74	69.78	-394.30	192.68	275.74	261.30	14.43	19.107	
2,200.00	2,162.50	2,144.26	2,056.96	8.03	8.19	69.08	-431.92	212.60	302.61	287.43	15.18	19.935	
2,300.00	2,259.10	2,240.52	2,143.30	8.43	8.65	68.50	-469.54	232.52	329.52	313.59	15.93	20.681	
2,400.00	2,355.69	2,336.78	2,229.64	8.83	9.11	68.01	-507.16	252.44	356.46	339.77	16.69	21.358	
2,500.00	2,452.28	2,433.05	2,315.97	9.23	9.57	67.59	-544.78	272.36	383.42	365.97	17.45	21.973	
2,600.00	2,548.88	2,529.31	2,402.31	9.64	10.04	67.22	-582.40	292.29	410.40	392.19	18.21	22.535	
2,700.00	2,645.47	2,625.57	2,488.65	10.04	10.51	66.90	-620.01	312.21	437.39	418.41	18.98	23.050	
2,800.00	2,742.06	2,721.83	2,574.99	10.44	10.98	66.61	-657.63	332.13	464.39	444.65	19.74	23.523	
2,900.00	2,838.66	2,818.09	2,661.33	10.85	11.45	66.36	-695.25	352.05	491.40	470.89	20.51	23.960	
3,000.00	2,935.25	2,914.35	2,747.67	11.26	11.93	66.13	-732.87	371.97	518.42	497.14	21.28	24.363	
3,100.00	3,031.84	3,010.61	2,834.00	11.66	12.40	65.93	-770.49	391.89	545.44	523.40	22.05	24.738	
3,200.00	3,128.44	3,106.88	2,920.34	12.07	12.88	65.74	-808.10	411.81	572.48	549.66	22.82	25.086	
3,300.00	3,225.03	3,203.14	3,006.68	12.47	13.36	65.57	-845.72	431.74	599.51	575.92	23.59	25.410	
3,400.00	3,321.62	3,299.40	3,093.02	12.88	13.84	65.42	-883.34	451.66	626.55	602.19	24.37	25.713	
3,500.00	3,418.22	3,395.66	3,179.36	13.29	14.31	65.28	-920.96	471.58	653.60	628.46	25.14	25.997	
3,600.00	3,514.81	3,491.92	3,265.69	13.70	14.79	65.15	-958.58	491.50	680.65	654.73	25.92	26.263	
3,700.00	3,611.40	3,588.18	3,352.03	14.10	15.28	65.03	-996.19	511.42	707.70	681.01	26.69	26.513	
3,800.00	3,708.00	3,684.44	3,438.37	14.51	15.76	64.91	-1,033.81	531.34	734.75	707.28	27.47	26.748	
3,900.00	3,804.59	3,780.71	3,524.71	14.92	16.24	64.81	-1,071.43	551.26	761.81	733.56	28.25	26.970	
4,000.00	3,901.18	3,876.97	3,611.05	15.33	16.72	64.71	-1,109.05	571.19	788.87	759.84	29.02	27.179	
4,100.00	3,997.78	3,973.23	3,697.39	15.74	17.20	64.62	-1,146.67	591.11	815.93	786.12	29.80	27.378	
4,200.00	4,094.37	4,069.49	3,783.72	16.15	17.69	64.54	-1,184.28	611.03	842.99	812.41	30.58	27.565	
4,300.00	4,190.96	4,165.75	3,870.06	16.55	18.17	64.46	-1,221.90	630.95	870.05	838.69	31.36	27.743	
4,400.00	4,287.56	4,262.01	3,956.40	16.96	18.66	64.39	-1,259.52	650.87	897.12	864.98	32.14	27.912	
4,500.00	4,384.15	4,358.27	4,042.74	17.37	19.14	64.32	-1,297.14	670.79	924.18	891.26	32.92	28.073	
4,600.00	4,480.74	4,454.54	4,129.08	17.78	19.63	64.25	-1,334.76	690.71	951.25	917.55	33.70	28.226	
4,700.00	4,577.34	4,550.80	4,215.41	18.19	20.11	64.19	-1,372.38	710.64	978.32	943.84	34.48	28.372	
4,800.00	4,673.93	4,647.06	4,301.75	18.60	20.60	64.13	-1,409.99	730.56	1,005.39	970.13	35.26	28.511	
4,900.00	4,770.52	4,743.32	4,388.09	19.01	21.08	64.07	-1,447.61	750.48	1,032.46	996.42	36.04	28.644	
5,000.00	4,867.12	4,839.58	4,474.43	19.42	21.57	64.02	-1,485.23	770.40	1,059.53	1,022.71	36.83	28.771	

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 203H
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 203H	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
Rule Assigned:												Warning	
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	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.00	4,963.71	4,935.84	4,560.77	19.83	22.05	63.97	-1,522.85	790.32	1,086.61	1,049.00	37.61	28.893	
5,200.00	5,060.30	5,032.10	4,647.11	20.24	22.54	63.92	-1,560.47	810.24	1,113.68	1,075.29	38.39	29.009	
5,300.00	5,156.90	5,128.37	4,733.44	20.65	23.03	63.88	-1,598.08	830.16	1,140.75	1,101.58	39.17	29.121	
5,400.00	5,253.49	5,224.63	4,819.78	21.06	23.51	63.83	-1,635.70	850.09	1,167.83	1,127.87	39.96	29.228	
5,500.00	5,350.08	5,320.89	4,906.12	21.47	24.00	63.79	-1,673.32	870.01	1,194.90	1,154.16	40.74	29.331	
5,600.00	5,446.68	5,417.15	4,992.46	21.88	24.49	63.75	-1,710.94	889.93	1,221.98	1,180.46	41.52	29.429	
5,612.36	5,458.62	5,429.05	5,003.13	21.93	24.55	63.75	-1,715.59	892.39	1,225.32	1,183.70	41.62	29.441	
5,700.00	5,543.60	5,513.23	5,078.63	22.28	24.97	64.11	-1,748.48	909.81	1,249.62	1,207.33	42.30	29.545	
5,800.00	5,641.32	5,608.76	5,164.32	22.68	25.46	64.42	-1,785.82	929.58	1,278.73	1,235.69	43.04	29.710	
5,900.00	5,739.72	5,703.63	5,249.41	23.06	25.94	64.64	-1,822.89	949.22	1,309.31	1,265.55	43.75	29.924	
6,000.00	5,838.69	5,797.73	5,333.80	23.43	26.41	64.76	-1,859.66	968.69	1,341.37	1,296.93	44.44	30.184	
6,100.00	5,938.09	5,890.93	5,417.40	23.79	26.89	64.80	-1,896.09	987.98	1,374.96	1,329.86	45.10	30.489	
6,200.00	6,037.81	6,000.19	5,515.50	24.13	27.44	64.64	-1,938.61	1,010.50	1,410.01	1,364.14	45.88	30.735	
6,300.00	6,137.73	6,202.40	5,701.69	24.46	28.40	63.79	-2,008.16	1,047.33	1,442.14	1,394.81	47.32	30.475	
6,362.28	6,200.00	6,334.01	5,826.30	24.66	28.98	-177.38	-2,045.52	1,067.11	1,459.25	1,411.13	48.12	30.324	
6,400.00	6,237.72	6,415.83	5,904.92	24.78	29.32	-177.84	-2,065.53	1,077.71	1,468.36	1,419.80	48.56	30.236	
6,500.00	6,337.72	6,640.00	6,123.90	25.08	30.16	-178.77	-2,107.54	1,099.96	1,486.94	1,437.37	49.56	30.002	
6,600.00	6,437.72	6,871.68	6,353.97	25.38	30.92	-179.26	-2,130.88	1,112.32	1,496.95	1,446.69	50.27	29.780	
6,700.00	6,537.72	7,055.53	6,537.72	25.69	31.43	-179.35	-2,135.00	1,114.50	1,498.70	1,447.93	50.77	29.520	
6,731.88	6,569.60	7,087.41	6,569.60	25.79	31.50	-179.35	-2,135.00	1,114.50	1,498.70	1,447.74	50.96	29.409	
6,750.00	6,587.72	7,105.61	6,587.81	25.84	31.55	-90.18	-2,135.00	1,114.41	1,498.70	1,447.63	51.06	29.349	
6,775.00	6,612.66	7,130.87	6,613.03	25.91	31.60	-90.20	-2,134.98	1,113.25	1,498.70	1,447.50	51.20	29.271	
6,800.00	6,637.49	7,156.15	6,638.18	25.98	31.66	-90.22	-2,134.95	1,110.76	1,498.70	1,447.37	51.33	29.196	
6,825.00	6,662.13	7,181.45	6,663.19	26.05	31.72	-90.23	-2,134.89	1,106.94	1,498.70	1,447.25	51.46	29.125	
6,850.00	6,686.52	7,206.77	6,687.99	26.11	31.77	-90.25	-2,134.82	1,101.79	1,498.71	1,447.13	51.58	29.057	
6,875.00	6,710.59	7,232.12	6,712.49	26.17	31.82	-90.26	-2,134.72	1,095.33	1,498.71	1,447.02	51.69	28.993	
6,900.00	6,734.27	7,257.49	6,736.64	26.23	31.87	-90.28	-2,134.61	1,087.57	1,498.71	1,446.91	51.80	28.932	
6,925.00	6,757.50	7,282.88	6,760.37	26.29	31.91	-90.29	-2,134.48	1,078.54	1,498.71	1,446.81	51.91	28.873	
6,950.00	6,780.21	7,308.29	6,783.59	26.34	31.95	-90.31	-2,134.34	1,068.24	1,498.72	1,446.71	52.01	28.818	
6,975.00	6,802.35	7,333.71	6,806.25	26.39	31.99	-90.32	-2,134.17	1,056.72	1,498.72	1,446.62	52.10	28.765	
7,000.00	6,823.85	7,359.15	6,828.28	26.44	32.03	-90.33	-2,133.99	1,044.00	1,498.72	1,446.53	52.19	28.715	
7,025.00	6,844.65	7,384.61	6,849.61	26.49	32.06	-90.34	-2,133.79	1,030.11	1,498.72	1,446.44	52.28	28.667	
7,050.00	6,864.70	7,410.08	6,870.19	26.53	32.09	-90.35	-2,133.57	1,015.10	1,498.73	1,446.36	52.36	28.621	
7,075.00	6,883.94	7,435.57	6,889.94	26.58	32.12	-90.36	-2,133.34	999.01	1,498.73	1,446.29	52.44	28.578	
7,100.00	6,902.32	7,461.06	6,908.81	26.62	32.14	-90.36	-2,133.10	981.87	1,498.73	1,446.21	52.52	28.536	
7,125.00	6,919.79	7,486.57	6,926.76	26.65	32.16	-90.37	-2,132.84	963.75	1,498.74	1,446.14	52.59	28.496	
7,150.00	6,936.29	7,512.08	6,943.71	26.69	32.18	-90.37	-2,132.56	944.69	1,498.74	1,446.07	52.66	28.458	
7,175.00	6,951.79	7,537.60	6,959.62	26.72	32.20	-90.38	-2,132.28	924.74	1,498.74	1,446.01	52.73	28.421	
7,200.00	6,966.25	7,563.13	6,974.45	26.75	32.21	-90.38	-2,131.98	903.97	1,498.74	1,445.94	52.80	28.385	
7,225.00	6,979.61	7,588.66	6,988.15	26.78	32.22	-90.38	-2,131.67	882.43	1,498.74	1,445.88	52.86	28.351	
7,250.00	6,991.86	7,614.19	7,000.68	26.81	32.22	-90.38	-2,131.35	860.19	1,498.75	1,445.82	52.93	28.318	
7,275.00	7,002.94	7,639.73	7,012.00	26.84	32.22	-90.38	-2,131.02	837.31	1,498.75	1,445.76	52.99	28.285	
7,300.00	7,012.84	7,665.26	7,022.09	26.86	32.22	-90.38	-2,130.69	813.86	1,498.75	1,445.71	53.05	28.254	
7,325.00	7,021.52	7,690.79	7,030.90	26.88	32.22	-90.38	-2,130.34	789.90	1,498.75	1,445.65	53.10	28.224	
7,350.00	7,028.97	7,716.32	7,038.42	26.90	32.22	-90.38	-2,129.99	765.52	1,498.75	1,445.60	53.16	28.195	
7,375.00	7,035.15	7,741.84	7,044.63	26.92	32.21	-90.37	-2,129.64	740.77	1,498.76	1,445.55	53.21	28.167	
7,400.00	7,040.06	7,767.36	7,049.50	26.94	32.20	-90.37	-2,129.28	715.73	1,498.76	1,445.50	53.26	28.141	
7,425.00	7,043.68	7,792.86	7,053.03	26.95	32.19	-90.36	-2,128.92	690.47	1,498.76	1,445.45	53.31	28.116	
7,450.00	7,046.00	7,818.36	7,055.20	26.96	32.17	-90.35	-2,128.55	665.07	1,498.76	1,445.41	53.35	28.092	
7,475.00	7,047.01	7,843.84	7,056.02	26.97	32.16	-90.34	-2,128.19	639.61	1,498.76	1,445.37	53.39	28.070	
7,489.85	7,047.00	7,858.83	7,055.92	26.98	32.15	-90.34	-2,127.97	624.62	1,498.76	1,445.34	53.42	28.058	
7,500.00	7,046.83	7,868.98	7,055.82	26.98	32.15	-90.34	-2,127.82	614.47	1,498.76	1,445.33	53.43	28.049	

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 203H
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 203H	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							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			
7,600.00	7,045.16	7,968.98	7,054.82	27.05	32.10	-90.37	-2,126.39	514.49	1,498.78	1,445.12	53.65	27.935				
7,700.00	7,043.49	8,068.98	7,053.81	27.15	32.05	-90.39	-2,124.95	414.51	1,498.79	1,444.83	53.96	27.774				
7,800.00	7,041.82	8,168.98	7,052.81	27.31	32.02	-90.42	-2,123.52	314.52	1,498.80	1,444.44	54.36	27.570				
7,900.00	7,040.15	8,268.97	7,051.80	27.51	31.99	-90.45	-2,122.09	214.54	1,498.82	1,443.96	54.86	27.323				
8,000.00	7,038.48	8,368.97	7,050.80	27.76	31.98	-90.47	-2,120.65	114.56	1,498.83	1,443.40	55.43	27.038				
8,100.00	7,036.81	8,468.97	7,049.80	28.06	31.97	-90.50	-2,119.22	14.58	1,498.84	1,442.75	56.10	26.719				
8,200.00	7,035.14	8,568.97	7,048.79	28.40	31.98	-90.52	-2,117.78	-85.40	1,498.86	1,442.02	56.84	26.369				
8,300.00	7,033.48	8,668.96	7,047.79	28.79	32.00	-90.55	-2,116.35	-185.39	1,498.87	1,441.21	57.66	25.993				
8,400.00	7,031.81	8,768.96	7,046.78	29.22	32.04	-90.57	-2,114.91	-285.37	1,498.89	1,440.33	58.56	25.595				
8,500.00	7,030.14	8,868.96	7,045.78	29.70	32.12	-90.60	-2,113.48	-385.35	1,498.91	1,439.37	59.53	25.178				
8,600.00	7,028.47	8,968.96	7,044.78	30.21	32.23	-90.62	-2,112.04	-485.33	1,498.92	1,438.35	60.57	24.747				
8,700.00	7,026.80	9,068.96	7,043.77	30.75	32.39	-90.65	-2,110.61	-585.32	1,498.94	1,437.27	61.67	24.305				
8,800.00	7,025.13	9,168.95	7,042.77	31.33	32.63	-90.67	-2,109.17	-685.30	1,498.95	1,436.12	62.84	23.855				
8,900.00	7,023.46	9,268.95	7,041.76	31.94	32.96	-90.70	-2,107.74	-785.28	1,498.97	1,434.91	64.06	23.400				
9,000.00	7,021.79	9,368.95	7,040.76	32.58	33.38	-90.73	-2,106.30	-885.26	1,498.99	1,433.65	65.34	22.943				
9,100.00	7,020.12	9,468.95	7,039.76	33.25	33.89	-90.75	-2,104.87	-985.25	1,499.01	1,432.34	66.67	22.486				
9,200.00	7,018.45	9,568.94	7,038.75	33.94	34.47	-90.78	-2,103.43	-1,085.23	1,499.02	1,430.98	68.04	22.031				
9,300.00	7,016.78	9,668.94	7,037.75	34.66	35.10	-90.80	-2,102.00	-1,185.21	1,499.04	1,429.58	69.47	21.580				
9,400.00	7,015.11	9,768.94	7,036.74	35.39	35.78	-90.83	-2,100.56	-1,285.19	1,499.06	1,428.13	70.93	21.134				
9,500.00	7,013.45	9,868.94	7,035.74	36.15	36.50	-90.85	-2,099.13	-1,385.18	1,499.08	1,426.64	72.44	20.695				
9,600.00	7,011.78	9,968.94	7,034.74	36.93	37.24	-90.88	-2,097.69	-1,485.16	1,499.10	1,425.12	73.98	20.263				
9,700.00	7,010.11	10,068.93	7,033.73	37.72	38.01	-90.90	-2,096.26	-1,585.14	1,499.12	1,423.55	75.56	19.839				
9,800.00	7,008.44	10,168.93	7,032.73	38.54	38.80	-90.93	-2,094.82	-1,685.12	1,499.14	1,421.96	77.18	19.425				
9,900.00	7,006.77	10,268.93	7,031.72	39.36	39.62	-90.95	-2,093.39	-1,785.11	1,499.16	1,420.34	78.82	19.020				
10,000.00	7,005.10	10,368.93	7,030.72	40.20	40.44	-90.98	-2,091.96	-1,885.09	1,499.18	1,418.68	80.49	18.625				
10,100.00	7,003.43	10,468.92	7,029.72	41.06	41.29	-91.00	-2,090.52	-1,985.07	1,499.20	1,417.00	82.20	18.239				
10,200.00	7,001.76	10,568.92	7,028.71	41.93	42.15	-91.03	-2,089.09	-2,085.05	1,499.22	1,415.29	83.92	17.864				
10,300.00	7,000.09	10,668.92	7,027.71	42.81	43.02	-91.06	-2,087.65	-2,185.04	1,499.24	1,413.56	85.68	17.499				
10,400.00	6,998.42	10,768.92	7,026.70	43.70	43.91	-91.08	-2,086.22	-2,285.02	1,499.26	1,411.81	87.45	17.144				
10,500.00	6,996.75	10,868.92	7,025.70	44.61	44.80	-91.11	-2,084.78	-2,385.00	1,499.28	1,410.03	89.25	16.799				
10,600.00	6,995.08	10,968.91	7,024.70	45.52	45.71	-91.13	-2,083.35	-2,484.98	1,499.30	1,408.24	91.06	16.464				
10,700.00	6,993.42	11,068.91	7,023.69	46.44	46.63	-91.16	-2,081.91	-2,584.97	1,499.33	1,406.43	92.90	16.139				
10,800.00	6,991.75	11,168.91	7,022.69	47.37	47.56	-91.18	-2,080.48	-2,684.95	1,499.35	1,404.59	94.75	15.824				
10,900.00	6,990.08	11,268.91	7,021.68	48.31	48.49	-91.21	-2,079.04	-2,784.93	1,499.37	1,402.75	96.62	15.518				
11,000.00	6,988.41	11,368.90	7,020.68	49.26	49.43	-91.23	-2,077.61	-2,884.91	1,499.39	1,400.88	98.51	15.221				
11,100.00	6,986.74	11,468.90	7,019.68	50.22	50.39	-91.26	-2,076.17	-2,984.90	1,499.42	1,399.01	100.41	14.933				
11,200.00	6,985.07	11,568.90	7,018.67	51.18	51.34	-91.28	-2,074.74	-3,084.88	1,499.44	1,397.11	102.33	14.653				
11,300.00	6,983.40	11,668.90	7,017.67	52.15	52.31	-91.31	-2,073.30	-3,184.86	1,499.46	1,395.21	104.26	14.383				
11,400.00	6,981.73	11,768.90	7,016.66	53.12	53.28	-91.33	-2,071.87	-3,284.84	1,499.49	1,393.29	106.20	14.120				
11,500.00	6,980.06	11,868.89	7,015.66	54.10	54.26	-91.36	-2,070.43	-3,384.83	1,499.51	1,391.36	108.15	13.865				
11,600.00	6,978.39	11,968.89	7,014.66	55.09	55.24	-91.39	-2,069.00	-3,484.81	1,499.54	1,389.42	110.12	13.618				
11,700.00	6,976.72	12,068.89	7,013.65	56.08	56.23	-91.41	-2,067.56	-3,584.79	1,499.56	1,387.47	112.09	13.378				
11,800.00	6,975.06	12,168.89	7,012.65	57.08	57.22	-91.44	-2,066.13	-3,684.77	1,499.59	1,385.51	114.08	13.145				
11,900.00	6,973.39	12,268.88	7,011.64	58.08	58.22	-91.46	-2,064.69	-3,784.76	1,499.61	1,383.54	116.07	12.919				
12,000.00	6,971.72	12,368.88	7,010.64	59.09	59.23	-91.49	-2,063.26	-3,884.74	1,499.64	1,381.56	118.08	12.700				
12,100.00	6,970.05	12,468.88	7,009.64	60.10	60.23	-91.51	-2,061.82	-3,984.72	1,499.67	1,379.57	120.09	12.487				
12,200.00	6,968.38	12,568.88	7,008.63	61.11	61.24	-91.54	-2,060.39	-4,084.70	1,499.69	1,377.58	122.12	12.281				
12,300.00	6,966.71	12,668.88	7,007.63	62.13	62.26	-91.56	-2,058.96	-4,184.69	1,499.72	1,375.57	124.15	12.080				
12,400.00	6,965.04	12,768.87	7,006.62	63.15	63.28	-91.59	-2,057.52	-4,284.67	1,499.75	1,373.56	126.18	11.886				
12,500.00	6,963.37	12,868.87	7,005.62	64.18	64.30	-91.61	-2,056.09	-4,384.65	1,499.77	1,371.55	128.23	11.696				
12,600.00	6,961.70	12,968.87	7,004.62	65.21	65.33	-91.64	-2,054.65	-4,484.63	1,499.80	1,369.52	130.28	11.512				
12,700.00	6,960.03	13,068.87	7,003.61	66.24	66.36	-91.66	-2,053.22	-4,584.62	1,499.83	1,367.49	132.34	11.334				

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 203H
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 203H	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						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			
12,800.00	6,958.36	13,168.86	7,002.61	67.27	67.39	-91.69	-2,051.78	-4,684.60	1,499.86	1,365.46	134.40	11.160				
12,900.00	6,956.69	13,268.86	7,001.60	68.31	68.43	-91.72	-2,050.35	-4,784.58	1,499.89	1,363.42	136.47	10.991				
13,000.00	6,955.03	13,368.86	7,000.60	69.35	69.47	-91.74	-2,048.91	-4,884.56	1,499.92	1,361.37	138.54	10.826				
13,100.00	6,953.36	13,468.86	6,999.60	70.40	70.51	-91.77	-2,047.48	-4,984.55	1,499.95	1,359.32	140.63	10.666				
13,200.00	6,951.69	13,568.86	6,998.59	71.44	71.55	-91.79	-2,046.04	-5,084.53	1,499.97	1,357.26	142.71	10.511				
13,300.00	6,950.02	13,668.85	6,997.59	72.49	72.60	-91.82	-2,044.61	-5,184.51	1,500.00	1,355.20	144.80	10.359				
13,400.00	6,948.35	13,768.85	6,996.58	73.54	73.65	-91.84	-2,043.17	-5,284.49	1,500.03	1,353.14	146.90	10.211				
13,500.00	6,946.68	13,868.85	6,995.58	74.60	74.70	-91.87	-2,041.74	-5,384.48	1,500.07	1,351.07	149.00	10.068				
13,600.00	6,945.01	13,968.85	6,994.58	75.65	75.75	-91.89	-2,040.30	-5,484.46	1,500.10	1,348.99	151.10	9.928				
13,700.00	6,943.34	14,068.84	6,993.57	76.71	76.81	-91.92	-2,038.87	-5,584.44	1,500.13	1,346.92	153.21	9.791				
13,800.00	6,941.67	14,168.84	6,992.57	77.77	77.86	-91.94	-2,037.43	-5,684.42	1,500.16	1,344.84	155.32	9.658				
13,900.00	6,940.00	14,268.84	6,991.56	78.83	78.92	-91.97	-2,036.00	-5,784.40	1,500.19	1,342.75	157.44	9.529				
14,000.00	6,938.33	14,368.84	6,990.56	79.89	79.98	-91.99	-2,034.56	-5,884.39	1,500.22	1,340.66	159.56	9.402				
14,100.00	6,936.67	14,468.84	6,989.55	80.96	81.05	-92.02	-2,033.13	-5,984.37	1,500.25	1,338.57	161.68	9.279				
14,200.00	6,935.00	14,568.83	6,988.55	82.02	82.11	-92.05	-2,031.69	-6,084.35	1,500.29	1,336.48	163.81	9.159				
14,300.00	6,933.33	14,668.83	6,987.55	83.09	83.18	-92.07	-2,030.26	-6,184.33	1,500.32	1,334.38	165.94	9.041				
14,400.00	6,931.66	14,768.83	6,986.54	84.16	84.24	-92.10	-2,028.82	-6,284.32	1,500.35	1,332.28	168.07	8.927				
14,500.00	6,929.99	14,868.83	6,985.54	85.23	85.31	-92.12	-2,027.39	-6,384.30	1,500.39	1,330.18	170.21	8.815				
14,600.00	6,928.32	14,968.82	6,984.53	86.30	86.38	-92.15	-2,025.96	-6,484.28	1,500.42	1,328.07	172.34	8.706				
14,700.00	6,926.65	15,068.82	6,983.53	87.38	87.46	-92.17	-2,024.52	-6,584.26	1,500.45	1,325.97	174.49	8.599				
14,800.00	6,924.98	15,168.82	6,982.53	88.45	88.53	-92.20	-2,023.09	-6,684.25	1,500.49	1,323.86	176.63	8.495				
14,900.00	6,923.31	15,268.82	6,981.52	89.53	89.60	-92.22	-2,021.65	-6,784.23	1,500.52	1,321.75	178.78	8.393				
15,000.00	6,921.64	15,368.82	6,980.52	90.61	90.68	-92.25	-2,020.22	-6,884.21	1,500.56	1,319.63	180.93	8.294				
15,100.00	6,919.97	15,468.81	6,979.51	91.69	91.76	-92.27	-2,018.78	-6,984.19	1,500.59	1,317.52	183.08	8.197				
15,200.00	6,918.30	15,568.81	6,978.51	92.77	92.83	-92.30	-2,017.35	-7,084.18	1,500.63	1,315.40	185.23	8.101				
15,300.00	6,916.64	15,668.81	6,977.51	93.85	93.91	-92.32	-2,015.91	-7,184.16	1,500.66	1,313.28	187.39	8.008				
15,400.00	6,914.97	15,768.81	6,976.50	94.93	94.99	-92.35	-2,014.48	-7,284.14	1,500.70	1,311.15	189.54	7.917				
15,500.00	6,913.30	15,868.80	6,975.50	96.01	96.08	-92.38	-2,013.04	-7,384.12	1,500.74	1,309.03	191.70	7.828				
15,600.00	6,911.63	15,968.80	6,974.49	97.10	97.16	-92.40	-2,011.61	-7,484.11	1,500.77	1,306.91	193.87	7.741				
15,700.00	6,909.96	16,068.80	6,973.49	98.18	98.24	-92.43	-2,010.17	-7,584.09	1,500.81	1,304.78	196.03	7.656				
15,800.00	6,908.29	16,168.80	6,972.49	99.27	99.33	-92.45	-2,008.74	-7,684.07	1,500.85	1,302.65	198.20	7.573				
15,900.00	6,906.62	16,268.80	6,971.48	100.36	100.41	-92.48	-2,007.30	-7,784.05	1,500.88	1,300.52	200.36	7.491				
16,000.00	6,904.95	16,368.79	6,970.48	101.44	101.50	-92.50	-2,005.87	-7,884.04	1,500.92	1,298.39	202.53	7.411				
16,100.00	6,903.28	16,468.79	6,969.47	102.53	102.59	-92.53	-2,004.43	-7,984.02	1,500.96	1,296.26	204.70	7.332				
16,200.00	6,901.61	16,568.79	6,968.47	103.62	103.67	-92.55	-2,003.00	-8,084.00	1,501.00	1,294.12	206.87	7.256				
16,300.00	6,899.94	16,668.79	6,967.47	104.71	104.76	-92.58	-2,001.56	-8,183.98	1,501.04	1,291.99	209.05	7.180				
16,400.00	6,898.28	16,768.78	6,966.46	105.80	105.85	-92.60	-2,000.13	-8,283.97	1,501.08	1,289.85	211.22	7.107				
16,500.00	6,896.61	16,868.78	6,965.46	106.89	106.94	-92.63	-1,998.69	-8,383.95	1,501.11	1,287.71	213.40	7.034				
16,600.00	6,894.94	16,968.78	6,964.45	107.99	108.03	-92.65	-1,997.26	-8,483.93	1,501.15	1,285.57	215.58	6.963				
16,700.00	6,893.27	17,068.78	6,963.45	109.08	109.13	-92.68	-1,995.83	-8,583.91	1,501.19	1,283.44	217.76	6.894				
16,800.00	6,891.60	17,168.78	6,962.45	110.17	110.22	-92.70	-1,994.39	-8,683.90	1,501.23	1,281.29	219.94	6.826				
16,900.00	6,889.93	17,268.77	6,961.44	111.27	111.31	-92.73	-1,992.96	-8,783.88	1,501.27	1,279.15	222.12	6.759				
17,000.00	6,888.26	17,368.77	6,960.44	112.36	112.41	-92.76	-1,991.52	-8,883.86	1,501.31	1,277.01	224.30	6.693				
17,100.00	6,886.59	17,468.77	6,959.43	113.46	113.50	-92.78	-1,990.09	-8,983.84	1,501.36	1,274.87	226.49	6.629				
17,200.00	6,884.92	17,568.77	6,958.43	114.56	114.60	-92.81	-1,988.65	-9,083.83	1,501.40	1,272.72	228.67	6.566				
17,300.00	6,883.25	17,668.77	6,957.43	115.65	115.69	-92.83	-1,987.22	-9,183.81	1,501.44	1,270.58	230.86	6.504				
17,400.00	6,881.58	17,768.76	6,956.42	116.75	116.79	-92.86	-1,985.78	-9,283.79	1,501.48	1,268.43	233.05	6.443				
17,500.00	6,879.91	17,868.76	6,955.42	117.85	117.89	-92.88	-1,984.35	-9,383.77	1,501.52	1,266.28	235.24	6.383				
17,600.00	6,878.25	17,968.76	6,954.41	118.95	118.98	-92.91	-1,982.91	-9,483.76	1,501.57	1,264.14	237.43	6.324				
17,700.00	6,876.58	18,068.76	6,953.41	120.05	120.08	-92.93	-1,981.48	-9,583.74	1,501.61	1,261.99	239.62	6.267				
17,800.00	6,874.91	18,168.75	6,952.41	121.15	121.18	-92.96	-1,980.04	-9,683.72	1,501.65	1,259.84	241.81	6.210				
17,800.27	6,874.90	18,169.03	6,952.40	121.15	121.18	-92.96	-1,980.04	-9,683.99	1,501.65	1,259.83	241.82	6.210				

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 203H
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 203H	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		Offset Wellbore Centre			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			
17,854.35	6,874.00	18,209.14	6,952.00	121.75	121.62	-92.97	-1,979.46	-9,724.10	1,501.74	1,258.87	242.87	6.183 SF			

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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		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)			
13,200.00	6,951.69	7,055.26	7,032.77	71.44	153.13	92.09	1,892.59	-5,502.15	2,480.17	2,256.69	223.48	11.098	
13,300.00	6,950.02	7,052.51	7,030.02	72.49	153.04	92.03	1,892.68	-5,502.15	2,463.04	2,238.22	224.82	10.955	
13,400.00	6,948.35	7,049.76	7,027.27	73.54	152.95	91.97	1,892.77	-5,502.15	2,449.87	2,223.79	226.08	10.836	
13,500.00	6,946.68	7,047.01	7,024.52	74.60	152.85	91.90	1,892.86	-5,502.15	2,440.73	2,213.48	227.25	10.740	
13,600.00	6,945.01	7,044.26	7,021.78	75.65	152.76	91.84	1,892.94	-5,502.15	2,435.66	2,207.34	228.33	10.667	
13,673.60	6,943.78	7,042.24	7,019.76	76.43	152.69	91.79	1,893.01	-5,502.15	2,434.55	2,205.51	229.05	10.629 CC	
13,700.00	6,943.34	7,041.51	7,019.03	76.71	152.67	91.77	1,893.03	-5,502.15	2,434.70	2,205.40	229.29	10.618 ES	
13,800.00	6,941.67	7,038.77	7,016.29	77.77	152.58	91.71	1,893.11	-5,502.15	2,437.83	2,207.69	230.14	10.593	
13,900.00	6,940.00	7,036.03	7,013.55	78.83	152.49	91.64	1,893.20	-5,502.15	2,445.05	2,214.17	230.88	10.590 SF	
14,000.00	6,938.33	7,033.29	7,010.82	79.89	152.39	91.58	1,893.28	-5,502.15	2,456.33	2,224.83	231.49	10.611	
14,100.00	6,936.67	7,030.55	7,008.08	80.96	152.30	91.51	1,893.36	-5,502.15	2,471.60	2,239.61	231.99	10.654	
14,200.00	6,935.00	7,027.82	7,005.35	82.02	152.21	91.45	1,893.44	-5,502.15	2,490.79	2,258.42	232.37	10.719	

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 203H
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 203H	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	171.83	-501.68	71.98	508.13					
100.00	100.00	63.50	100.00	0.25	3.18	171.83	-501.68	71.98	506.82	503.39	3.43	147.829		
200.00	200.00	163.50	200.00	0.61	8.18	171.83	-501.68	71.98	506.82	498.03	8.79	57.655		
300.00	300.00	263.50	300.00	0.97	13.18	171.83	-501.68	71.98	506.82	492.66	14.15	35.811		
400.00	400.00	363.50	400.00	1.33	18.19	171.83	-501.68	71.98	506.82	487.30	19.51	25.971		
500.00	500.00	463.50	500.00	1.68	23.19	171.83	-501.68	71.98	506.82	481.94	24.88	20.373		
600.00	600.00	563.50	600.00	2.04	27.59	171.83	-501.68	71.98	506.82	477.18	29.64	17.101		
700.00	699.98	663.48	699.98	2.39	31.65	52.66	-501.68	71.98	505.75	471.72	34.04	14.859		
800.00	799.84	763.34	799.84	2.73	35.70	53.18	-501.68	71.98	502.60	464.17	38.43	13.079		
900.00	899.45	862.95	899.45	3.08	39.74	54.07	-501.68	71.98	497.41	454.60	42.81	11.618		
1,000.00	998.70	962.20	998.70	3.42	43.76	55.33	-501.68	71.98	490.34	443.15	47.19	10.391		
1,100.00	1,097.47	1,060.97	1,097.47	3.78	47.75	56.99	-501.68	71.98	481.55	430.02	51.53	9.346		
1,200.00	1,195.62	1,159.12	1,195.62	4.14	51.70	59.09	-501.68	71.98	471.31	415.48	55.83	8.442		
1,300.00	1,293.06	1,256.56	1,293.06	4.51	55.61	61.65	-501.68	71.98	459.97	399.86	60.11	7.652		
1,349.92	1,341.38	1,304.88	1,341.38	4.70	57.56	63.11	-501.68	71.98	454.03	391.78	62.24	7.295		
1,400.00	1,389.76	1,353.26	1,389.76	4.89	59.50	64.54	-501.68	71.98	448.15	383.77	64.37	6.962		
1,500.00	1,486.35	1,449.85	1,486.35	5.27	63.39	67.52	-501.68	71.98	437.32	368.69	68.64	6.372		
1,600.00	1,582.95	1,546.45	1,582.95	5.66	67.27	70.63	-501.68	71.98	427.80	354.90	72.90	5.868		
1,700.00	1,679.54	1,643.04	1,679.54	6.05	71.14	73.86	-501.68	71.98	419.65	342.48	77.17	5.438		
1,800.00	1,776.13	1,739.63	1,776.13	6.44	75.02	77.20	-501.68	71.98	412.96	331.53	81.44	5.071		
1,900.00	1,872.73	1,836.23	1,872.73	6.83	78.89	80.63	-501.68	71.98	407.81	322.10	85.71	4.758		
2,000.00	1,969.32	1,932.82	1,969.32	7.23	82.77	84.12	-501.68	71.98	404.26	314.27	89.99	4.492		
2,100.00	2,065.91	2,029.41	2,065.91	7.63	86.64	87.67	-501.68	71.98	402.34	308.08	94.26	4.268		
2,165.49	2,129.17	2,092.67	2,129.17	7.89	89.17	90.00	-501.68	71.98	401.98	304.92	97.06	4.141		
2,200.00	2,162.50	2,126.00	2,162.50	8.03	90.51	91.23	-501.68	71.98	402.08	303.55	98.54	4.081		
2,300.00	2,259.10	2,222.60	2,259.10	8.43	94.38	94.78	-501.68	71.98	403.49	300.68	102.81	3.925		
2,400.00	2,355.69	2,319.19	2,355.69	8.83	98.25	98.30	-501.68	71.98	406.54	299.46	107.08	3.797		
2,500.00	2,452.28	2,415.78	2,452.28	9.23	102.12	101.75	-501.68	71.98	411.20	299.86	111.34	3.693		
2,600.00	2,548.88	2,512.38	2,548.88	9.64	105.99	105.12	-501.68	71.98	417.42	301.82	115.60	3.611		
2,700.00	2,645.47	2,608.97	2,645.47	10.04	109.86	108.39	-501.68	71.98	425.12	305.27	119.85	3.547		
2,800.00	2,742.06	2,705.56	2,742.06	10.44	113.73	111.53	-501.68	71.98	434.23	310.13	124.10	3.499		
2,900.00	2,838.66	2,802.16	2,838.66	10.85	117.60	114.55	-501.68	71.98	444.66	316.33	128.34	3.465		
3,000.00	2,935.25	2,898.75	2,935.25	11.26	121.47	117.43	-501.68	71.98	456.32	323.75	132.57	3.442		
3,100.00	3,031.84	2,995.34	3,031.84	11.66	125.33	120.16	-501.68	71.98	469.13	332.32	136.80	3.429		
3,200.00	3,128.44	3,091.94	3,128.44	12.07	129.20	122.75	-501.68	71.98	482.98	341.95	141.03	3.425		
3,300.00	3,225.03	3,188.53	3,225.03	12.47	133.07	125.20	-501.68	71.98	497.79	352.54	145.25	3.427		
3,400.00	3,321.62	3,285.12	3,321.62	12.88	136.94	127.51	-501.68	71.98	513.48	364.01	149.47	3.435		
3,500.00	3,418.22	3,381.72	3,418.22	13.29	140.80	129.69	-501.68	71.98	529.97	376.28	153.68	3.448		
3,600.00	3,514.81	3,478.31	3,514.81	13.70	144.67	131.73	-501.68	71.98	547.18	389.28	157.90	3.465		
3,700.00	3,611.40	3,574.90	3,611.40	14.10	148.54	133.66	-501.68	71.98	565.06	402.95	162.11	3.486		
3,800.00	3,708.00	3,671.50	3,708.00	14.51	152.40	135.47	-501.68	71.98	583.54	417.22	166.32	3.508		
3,900.00	3,804.59	3,768.09	3,804.59	14.92	156.27	137.17	-501.68	71.98	602.56	432.03	170.53	3.533		
4,000.00	3,901.18	3,864.68	3,901.18	15.33	160.14	138.76	-501.68	71.98	622.08	447.34	174.74	3.560		
4,100.00	3,997.78	3,961.28	3,997.78	15.74	164.00	140.26	-501.68	71.98	642.05	463.10	178.95	3.588		
4,200.00	4,094.37	4,057.87	4,094.37	16.15	167.87	141.68	-501.68	71.98	662.43	479.26	183.16	3.617		
4,300.00	4,190.96	4,154.46	4,190.96	16.55	171.73	143.01	-501.68	71.98	683.18	495.81	187.37	3.646		
4,400.00	4,287.56	4,251.06	4,287.56	16.96	175.60	144.26	-501.68	71.98	704.27	512.69	191.58	3.676		
4,500.00	4,384.15	4,347.65	4,384.15	17.37	179.46	145.44	-501.68	71.98	725.67	529.88	195.79	3.706		
4,600.00	4,480.74	4,444.24	4,480.74	17.78	183.33	146.55	-501.68	71.98	747.35	547.35	200.00	3.737		
4,700.00	4,577.34	4,540.84	4,577.34	18.19	187.20	147.61	-501.68	71.98	769.29	565.08	204.21	3.767		
4,800.00	4,673.93	4,637.43	4,673.93	18.60	191.06	148.60	-501.68	71.98	791.47	583.05	208.42	3.798		
4,900.00	4,770.52	4,734.02	4,770.52	19.01	194.93	149.54	-501.68	71.98	813.87	601.24	212.63	3.828		

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 203H
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 203H	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						Rule Assigned:						Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		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				
5,000.00	4,867.12	4,830.62	4,867.12	19.42	198.79	150.43	-501.68	71.98	836.47	619.63	216.84	3.858				
5,100.00	4,963.71	4,927.21	4,963.71	19.83	202.66	151.28	-501.68	71.98	859.26	638.21	221.05	3.887				
5,200.00	5,060.30	5,023.80	5,060.30	20.24	206.52	152.08	-501.68	71.98	882.21	656.95	225.26	3.916				
5,300.00	5,156.90	5,120.40	5,156.90	20.65	210.39	152.84	-501.68	71.98	905.33	675.85	229.47	3.945				
5,400.00	5,253.49	5,216.99	5,253.49	21.06	214.25	153.56	-501.68	71.98	928.59	694.90	233.68	3.974				
5,500.00	5,350.08	5,313.58	5,350.08	21.47	218.12	154.25	-501.68	71.98	951.98	714.08	237.90	4.002				
5,600.00	5,446.68	5,410.18	5,446.68	21.88	221.98	154.91	-501.68	71.98	975.50	733.39	242.11	4.029				
5,612.36	5,458.62	5,422.12	5,458.62	21.93	222.46	154.99	-501.68	71.98	978.42	735.78	242.63	4.033				
5,700.00	5,543.60	5,507.10	5,543.60	22.28	225.86	155.67	-501.68	71.98	997.95	751.61	246.34	4.051				
5,800.00	5,641.32	5,604.82	5,641.32	22.68	229.77	156.32	-501.68	71.98	1,017.40	766.80	250.59	4.060				
5,900.00	5,739.72	5,703.22	5,739.72	23.06	233.71	156.85	-501.68	71.98	1,033.76	778.88	254.88	4.056				
6,000.00	5,838.69	5,802.19	5,838.69	23.43	237.67	157.26	-501.68	71.98	1,046.99	787.80	259.19	4.039				
6,100.00	5,938.09	5,901.59	5,938.09	23.79	241.64	157.56	-501.68	71.98	1,057.04	793.53	263.51	4.011				
6,200.00	6,037.81	6,001.31	6,037.81	24.13	245.63	157.77	-501.68	71.98	1,063.89	796.04	267.85	3.972				
6,300.00	6,137.73	6,101.23	6,137.73	24.46	249.63	157.87	-501.68	71.98	1,067.52	795.33	272.19	3.922				
6,362.28	6,200.00	6,163.50	6,200.00	24.66	252.12	-82.75	-501.68	71.98	1,068.15	793.26	274.89	3.886				
6,400.00	6,237.72	6,201.22	6,237.72	24.78	253.63	-82.75	-501.68	71.98	1,068.15	791.63	276.51	3.863				
6,500.00	6,337.72	6,301.22	6,337.72	25.08	257.63	-82.75	-501.68	71.98	1,068.15	787.31	280.83	3.804				
6,600.00	6,437.72	6,401.22	6,437.72	25.38	261.64	-82.75	-501.68	71.98	1,068.15	782.99	285.15	3.746				
6,700.00	6,537.72	6,501.22	6,537.72	25.69	265.64	-82.75	-501.68	71.98	1,068.15	778.67	289.47	3.690				
6,731.88	6,569.60	6,533.10	6,569.60	25.79	266.91	-82.75	-501.68	71.98	1,068.15	777.30	290.85	3.673				
6,750.00	6,587.72	6,551.22	6,587.72	25.84	267.64	6.43	-501.68	71.98	1,067.80	776.17	291.63	3.661				
6,775.00	6,612.66	6,576.16	6,612.66	25.91	268.63	6.46	-501.68	71.98	1,066.21	773.51	292.70	3.643				
6,800.00	6,637.49	6,600.99	6,637.49	25.98	269.63	6.51	-501.68	71.98	1,063.33	769.55	293.77	3.620				
6,825.00	6,662.13	6,625.63	6,662.13	26.05	270.61	6.60	-501.68	71.98	1,059.15	764.32	294.83	3.592				
6,850.00	6,686.52	6,650.02	6,686.52	26.11	271.59	6.71	-501.68	71.98	1,053.70	757.83	295.87	3.561				
6,875.00	6,710.59	6,674.09	6,710.59	26.17	272.55	6.85	-501.68	71.98	1,046.99	750.09	296.90	3.526				
6,900.00	6,734.27	6,697.77	6,734.27	26.23	273.50	7.03	-501.68	71.98	1,039.04	741.13	297.91	3.488				
6,925.00	6,757.50	6,721.00	6,757.50	26.29	274.43	7.24	-501.68	71.98	1,029.87	730.97	298.90	3.445				
6,950.00	6,780.21	6,743.71	6,780.21	26.34	275.34	7.49	-501.68	71.98	1,019.51	719.64	299.87	3.400				
6,975.00	6,802.35	6,765.85	6,802.35	26.39	276.22	7.78	-501.68	71.98	1,007.98	707.17	300.81	3.351				
7,000.00	6,823.85	6,787.35	6,823.85	26.44	277.08	8.13	-501.68	71.98	995.31	693.60	301.71	3.299				
7,025.00	6,844.65	6,808.15	6,844.65	26.49	277.92	8.53	-501.68	71.98	981.56	678.97	302.59	3.244				
7,050.00	6,864.70	6,828.20	6,864.70	26.53	278.72	9.00	-501.68	71.98	966.74	663.31	303.43	3.186				
7,075.00	6,883.94	6,847.44	6,883.94	26.58	279.49	9.55	-501.68	71.98	950.90	646.67	304.24	3.126				
7,100.00	6,902.32	6,865.82	6,902.32	26.62	280.22	10.19	-501.68	71.98	934.10	629.09	305.00	3.063				
7,125.00	6,919.79	6,883.29	6,919.79	26.65	280.92	10.94	-501.68	71.98	916.36	610.63	305.73	2.997				
7,150.00	6,936.29	6,899.79	6,936.29	26.69	281.58	11.83	-501.68	71.98	897.76	591.34	306.41	2.930				
7,175.00	6,951.79	6,915.29	6,951.79	26.72	282.20	12.90	-501.68	71.98	878.32	571.27	307.05	2.860				
7,200.00	6,966.25	6,929.75	6,966.25	26.75	282.78	14.17	-501.68	71.98	858.12	550.48	307.65	2.789				
7,225.00	6,979.61	6,943.11	6,979.61	26.78	283.32	15.71	-501.68	71.98	837.21	529.02	308.19	2.717				
7,250.00	6,991.86	6,955.36	6,991.86	26.81	283.81	17.59	-501.68	71.98	815.64	506.96	308.69	2.642				
7,275.00	7,002.94	6,966.44	7,002.94	26.84	284.25	19.93	-501.68	71.98	793.49	484.35	309.14	2.567				
7,300.00	7,012.84	6,976.34	7,012.84	26.86	284.65	22.87	-501.68	71.98	770.80	461.27	309.54	2.490				
7,325.00	7,021.52	6,985.02	7,021.52	26.88	284.99	26.63	-501.68	71.98	747.65	437.77	309.88	2.413				
7,350.00	7,028.97	6,992.47	7,028.97	26.90	285.29	31.51	-501.68	71.98	724.11	413.93	310.18	2.335				
7,375.00	7,035.15	6,998.65	7,035.15	26.92	285.54	37.94	-501.68	71.98	700.23	389.81	310.42	2.256				
7,400.00	7,040.06	7,003.56	7,040.06	26.94	285.73	46.44	-501.68	71.98	676.09	365.48	310.61	2.177				
7,425.00	7,043.68	7,007.18	7,043.68	26.95	285.88	57.47	-501.68	71.98	651.76	341.02	310.75	2.097				
7,450.00	7,046.00	7,009.50	7,046.00	26.96	285.97	71.01	-501.68	71.98	627.31	316.48	310.83	2.018				
7,475.00	7,047.01	7,010.51	7,047.01	26.97	286.01	85.92	-501.68	71.98	602.81	291.95	310.86	1.939 Collision Risk Procedures Req.				
7,489.85	7,047.00	7,010.50	7,047.00	26.98	286.01	94.60	-501.68	71.98	588.26	277.41	310.86	1.892 Collision Risk Procedures Req.				

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 203H
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 203H	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						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		
7,500.00	7,046.83	7,010.33	7,046.83	26.98	286.00	94.52	-501.68	71.98	578.33	267.48	310.85	1.860	Collision Risk Procedures Req.		
7,600.00	7,045.16	7,008.66	7,045.16	27.05	285.94	93.73	-501.68	71.98	480.94	170.19	310.75	1.548	Collision Risk Procedures Req.		
7,700.00	7,043.49	7,006.99	7,043.49	27.15	285.87	92.93	-501.68	71.98	384.89	74.22	310.66	1.239	Collision Risk Procedures Req.		
7,800.00	7,041.82	7,005.32	7,041.82	27.31	285.80	92.13	-501.68	71.98	291.49	-19.14	310.63	0.938	Collision Risk Procedures Req.		
7,900.00	7,040.15	7,003.65	7,040.15	27.51	285.74	91.33	-501.68	71.98	204.42	-106.41	310.83	0.658	Collision Risk Procedures Req.		
8,000.00	7,038.48	7,001.98	7,038.48	27.76	285.67	90.53	-501.68	71.98	136.40	-175.61	312.01	0.437	Collision Risk Procedures Req.		
8,065.95	7,037.38	7,000.88	7,037.38	27.95	285.63	90.00	-501.68	71.98	119.41	-193.97	313.38	0.381	Collision Risk Procedures Req., CC, ES		
8,100.00	7,036.81	7,000.31	7,036.81	28.06	285.60	89.73	-501.68	71.98	124.17	-189.49	313.66	0.396	Collision Risk Procedures Req.		
8,200.00	7,035.14	6,998.64	7,035.14	28.40	285.54	88.93	-501.68	71.98	179.51	-133.31	312.83	0.574	Collision Risk Procedures Req.		
8,300.00	7,033.48	6,996.98	7,033.48	28.79	285.47	88.13	-501.68	71.98	262.73	-49.25	311.98	0.842	Collision Risk Procedures Req.		
8,400.00	7,031.81	6,995.31	7,031.81	29.22	285.40	87.33	-501.68	71.98	354.71	43.21	311.50	1.139	Collision Risk Procedures Req.		
8,500.00	7,030.14	6,993.64	7,030.14	29.70	285.34	86.53	-501.68	71.98	450.12	138.92	311.20	1.446	Collision Risk Procedures Req.		
8,600.00	7,028.47	6,991.97	7,028.47	30.21	285.27	85.73	-501.68	71.98	547.17	236.18	310.99	1.759	Collision Risk Procedures Req.		
8,700.00	7,026.80	6,990.30	7,026.80	30.75	285.20	84.94	-501.68	71.98	645.11	334.28	310.83	2.075			
8,800.00	7,025.13	6,988.63	7,025.13	31.33	285.14	84.14	-501.68	71.98	743.60	432.90	310.71	2.393			
8,900.00	7,023.46	6,986.96	7,023.46	31.94	285.07	83.35	-501.68	71.98	842.44	531.85	310.60	2.712			
9,000.00	7,021.79	6,985.29	7,021.79	32.58	285.00	82.56	-501.68	71.98	941.53	631.03	310.50	3.032			
9,100.00	7,020.12	6,983.62	7,020.12	33.25	284.94	81.78	-501.68	71.98	1,040.78	730.37	310.41	3.353			
9,200.00	7,018.45	6,981.95	7,018.45	33.94	284.87	80.99	-501.68	71.98	1,140.17	829.84	310.33	3.674			
9,300.00	7,016.78	6,980.28	7,016.78	34.66	284.80	80.21	-501.68	71.98	1,239.65	929.39	310.25	3.996			
9,400.00	7,015.11	6,978.61	7,015.11	35.39	284.74	79.44	-501.68	71.98	1,339.20	1,029.02	310.18	4.317			
9,500.00	7,013.45	6,976.95	7,013.45	36.15	284.67	78.67	-501.68	71.98	1,438.82	1,128.70	310.11	4.640			
9,600.00	7,011.78	6,975.28	7,011.78	36.93	284.60	77.90	-501.68	71.98	1,538.48	1,228.43	310.05	4.962			
9,700.00	7,010.11	6,973.61	7,010.11	37.72	284.54	77.14	-501.68	71.98	1,638.19	1,328.20	309.99	5.285			
9,800.00	7,008.44	6,971.94	7,008.44	38.54	284.47	76.38	-501.68	71.98	1,737.92	1,427.99	309.93	5.608			
9,900.00	7,006.77	6,970.27	7,006.77	39.36	284.40	75.62	-501.68	71.98	1,837.68	1,527.81	309.87	5.930			
10,000.00	7,005.10	6,968.60	7,005.10	40.20	284.34	74.87	-501.68	71.98	1,937.47	1,627.65	309.81	6.254			
10,100.00	7,003.43	6,966.93	7,003.43	41.06	284.27	74.13	-501.68	71.98	2,037.27	1,727.51	309.76	6.577			
10,200.00	7,001.76	6,965.26	7,001.76	41.93	284.20	73.39	-501.68	71.98	2,137.10	1,827.39	309.71	6.900			
10,300.00	7,000.09	6,963.59	7,000.09	42.81	284.14	72.66	-501.68	71.98	2,236.93	1,927.28	309.66	7.224			
10,400.00	6,998.42	6,961.92	6,998.42	43.70	284.07	71.93	-501.68	71.98	2,336.78	2,027.18	309.61	7.548			
10,500.00	6,996.75	6,960.25	6,996.75	44.61	284.00	71.21	-501.68	71.98	2,436.64	2,127.08	309.56	7.871			

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 203H
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 203H	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		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)			
8,700.00	7,026.80	7,017.48	7,030.98	30.75	168.05	91.46	887.69	-2,544.25	2,484.29	2,289.51	194.78	12.754	
8,800.00	7,025.13	7,015.62	7,029.12	31.33	168.01	91.39	887.70	-2,544.25	2,404.44	2,209.29	195.15	12.321	
8,900.00	7,023.46	7,013.75	7,027.25	31.94	167.96	91.32	887.70	-2,544.25	2,326.15	2,130.58	195.57	11.894	
9,000.00	7,021.79	7,011.89	7,025.38	32.58	167.91	91.25	887.71	-2,544.25	2,249.58	2,053.52	196.06	11.474	
9,100.00	7,020.12	7,010.02	7,023.52	33.25	167.87	91.17	887.71	-2,544.25	2,174.92	1,978.29	196.62	11.061	
9,200.00	7,018.45	7,008.16	7,021.66	33.94	167.82	91.10	887.71	-2,544.25	2,102.35	1,905.10	197.26	10.658	
9,300.00	7,016.78	7,006.29	7,019.79	34.66	167.78	91.03	887.72	-2,544.25	2,032.12	1,834.15	197.97	10.265	
9,400.00	7,015.11	7,004.43	7,017.93	35.39	167.73	90.96	887.72	-2,544.25	1,964.47	1,765.70	198.77	9.883	
9,500.00	7,013.45	7,002.57	7,016.07	36.15	167.68	90.88	887.73	-2,544.25	1,899.67	1,700.02	199.65	9.515	
9,600.00	7,011.78	7,000.71	7,014.20	36.93	167.64	90.81	887.73	-2,544.25	1,838.03	1,637.41	200.62	9.162	
9,700.00	7,010.11	6,998.84	7,012.34	37.72	167.59	90.74	887.73	-2,544.25	1,779.87	1,578.21	201.67	8.826	
9,800.00	7,008.44	6,996.98	7,010.48	38.54	167.55	90.67	887.73	-2,544.25	1,725.56	1,522.76	202.79	8.509	
9,900.00	7,006.77	6,995.12	7,008.62	39.36	167.50	90.59	887.74	-2,544.25	1,675.45	1,471.46	203.99	8.213	
10,000.00	7,005.10	6,993.26	7,006.76	40.20	167.45	90.52	887.74	-2,544.25	1,629.94	1,424.70	205.24	7.942	
10,100.00	7,003.43	6,991.40	7,004.90	41.06	167.41	90.45	887.74	-2,544.25	1,589.43	1,382.90	206.53	7.696	
10,200.00	7,001.76	6,989.54	7,003.04	41.93	167.36	90.38	887.74	-2,544.25	1,554.30	1,346.47	207.83	7.479	
10,300.00	7,000.09	6,987.68	7,001.18	42.81	167.32	90.30	887.74	-2,544.25	1,524.93	1,315.82	209.12	7.292	
10,400.00	6,998.42	6,985.82	6,999.32	43.70	167.27	90.23	887.75	-2,544.25	1,501.66	1,291.29	210.37	7.138	
10,500.00	6,996.75	6,983.96	6,997.46	44.61	167.22	90.16	887.75	-2,544.25	1,484.76	1,273.22	211.54	7.019	
10,600.00	6,995.08	6,982.10	6,995.60	45.52	167.18	90.09	887.75	-2,544.25	1,474.47	1,261.85	212.62	6.935	
10,700.00	6,993.42	6,980.24	6,993.74	46.44	167.13	90.01	887.75	-2,544.25	1,470.92	1,257.34	213.58	6.887	
10,704.45	6,993.34	6,980.16	6,993.66	46.48	167.13	90.01	887.75	-2,544.25	1,470.92	1,257.30	213.61	6.886 CC, ES	
10,800.00	6,991.75	6,978.39	6,991.88	47.37	167.09	89.94	887.75	-2,544.25	1,474.16	1,259.77	214.38	6.876 SF	
10,900.00	6,990.08	6,976.57	6,990.08	48.31	167.04	89.87	887.05	-2,544.25	1,483.45	1,268.41	215.04	6.899	
11,000.00	6,988.41	6,974.90	6,988.41	49.26	167.00	89.81	887.05	-2,544.25	1,500.05	1,284.52	215.53	6.960	
11,100.00	6,986.74	6,973.23	6,986.74	50.22	166.96	89.74	887.05	-2,544.25	1,523.04	1,307.18	215.86	7.056	
11,200.00	6,985.07	6,971.56	6,985.07	51.18	166.92	89.68	887.05	-2,544.25	1,552.15	1,336.11	216.04	7.184	
11,300.00	6,983.40	6,969.90	6,983.40	52.15	166.88	89.61	887.05	-2,544.25	1,587.03	1,370.95	216.08	7.345	
11,400.00	6,981.73	6,968.23	6,981.73	53.12	166.84	89.55	887.05	-2,544.25	1,627.32	1,411.32	216.00	7.534	
11,500.00	6,980.06	6,966.56	6,980.06	54.10	166.79	89.48	887.05	-2,544.25	1,672.62	1,456.81	215.81	7.751	
11,600.00	6,978.39	6,964.89	6,978.39	55.09	166.75	89.42	887.05	-2,544.25	1,722.54	1,507.01	215.53	7.992	
11,700.00	6,976.72	6,963.22	6,976.72	56.08	166.71	89.35	887.05	-2,544.25	1,776.69	1,561.51	215.19	8.256	
11,800.00	6,975.06	6,961.55	6,975.06	57.08	166.67	89.29	887.05	-2,544.25	1,834.70	1,619.91	214.79	8.542	
11,900.00	6,973.39	6,959.88	6,973.39	58.08	166.63	89.22	887.05	-2,544.25	1,896.20	1,681.85	214.35	8.846	
12,000.00	6,971.72	6,958.21	6,971.72	59.09	166.59	89.16	887.05	-2,544.25	1,960.88	1,746.99	213.89	9.168	
12,100.00	6,970.05	6,956.54	6,970.05	60.10	166.55	89.09	887.05	-2,544.25	2,028.43	1,815.01	213.41	9.505	
12,200.00	6,968.38	6,954.87	6,968.38	61.11	166.51	89.03	887.05	-2,544.25	2,098.56	1,885.64	212.93	9.856	
12,300.00	6,966.71	6,953.20	6,966.71	62.13	166.47	88.96	887.05	-2,544.25	2,171.04	1,958.60	212.44	10.220	
12,400.00	6,965.04	6,951.53	6,965.04	63.15	166.42	88.90	887.05	-2,544.25	2,245.63	2,033.68	211.95	10.595	
12,500.00	6,963.37	6,949.87	6,963.37	64.18	166.38	88.83	887.05	-2,544.25	2,322.13	2,110.66	211.48	10.981	
12,600.00	6,961.70	6,948.20	6,961.70	65.21	166.34	88.77	887.05	-2,544.25	2,400.36	2,189.35	211.01	11.376	
12,700.00	6,960.03	6,946.53	6,960.03	66.24	166.30	88.70	887.05	-2,544.25	2,480.15	2,269.60	210.56	11.779	

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 203H
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 203H	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 - LAKEWOOD STATE COM #001 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 425-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)				
8,200.00	7,035.14	6,998.90	7,035.62	28.40	145.82	105.24	-429.39	-2,544.83	2,488.31	2,317.40	170.91	14.559		
8,300.00	7,033.48	6,997.20	7,033.92	28.79	145.77	104.65	-429.38	-2,544.83	2,388.52	2,217.65	170.87	13.978		
8,400.00	7,031.81	6,995.51	7,032.23	29.22	145.72	104.06	-429.38	-2,544.83	2,288.75	2,117.92	170.83	13.398		
8,500.00	7,030.14	6,993.81	7,030.53	29.70	145.67	103.46	-429.37	-2,544.83	2,189.01	2,018.21	170.80	12.816		
8,600.00	7,028.47	6,992.12	7,028.84	30.21	145.63	102.86	-429.37	-2,544.83	2,089.28	1,918.52	170.76	12.235		
8,700.00	7,026.80	6,990.42	7,027.14	30.75	145.58	102.26	-429.37	-2,544.83	1,989.58	1,818.85	170.73	11.654		
8,800.00	7,025.13	6,988.73	7,025.45	31.33	145.53	101.66	-429.36	-2,544.83	1,889.91	1,719.21	170.70	11.072		
8,900.00	7,023.46	6,987.03	7,023.75	31.94	145.48	101.05	-429.36	-2,544.83	1,790.27	1,619.60	170.67	10.490		
9,000.00	7,021.79	6,985.34	7,022.06	32.58	145.44	100.44	-429.36	-2,544.83	1,690.68	1,520.03	170.65	9.908		
9,100.00	7,020.12	6,983.64	7,020.36	33.25	145.39	99.83	-429.35	-2,544.83	1,591.14	1,420.51	170.63	9.325		
9,200.00	7,018.45	6,981.95	7,018.67	33.94	145.34	99.22	-429.35	-2,544.83	1,491.65	1,321.04	170.61	8.743		
9,300.00	7,016.78	6,980.26	7,016.98	34.66	145.30	98.60	-429.35	-2,544.83	1,392.24	1,221.63	170.61	8.161		
9,400.00	7,015.11	6,978.56	7,015.28	35.39	145.25	97.99	-429.35	-2,544.83	1,292.91	1,122.30	170.61	7.578		
9,500.00	7,013.45	6,976.87	7,013.59	36.15	145.20	97.37	-429.35	-2,544.83	1,193.70	1,023.07	170.62	6.996		
9,600.00	7,011.78	6,975.18	7,011.90	36.93	145.15	96.75	-429.34	-2,544.83	1,094.62	923.97	170.65	6.414		
9,700.00	7,010.11	6,973.49	7,010.21	37.72	145.11	96.13	-429.34	-2,544.83	995.73	825.02	170.71	5.833		
9,800.00	7,008.44	6,971.79	7,008.52	38.54	145.06	95.50	-429.34	-2,544.83	897.08	726.28	170.80	5.252		
9,900.00	7,006.77	6,970.10	7,006.83	39.36	145.01	94.88	-429.34	-2,544.83	798.76	627.82	170.94	4.673		
10,000.00	7,005.10	6,968.41	7,005.14	40.20	144.97	94.25	-429.34	-2,544.83	700.91	529.75	171.17	4.095		
10,100.00	7,003.43	6,966.72	7,003.45	41.06	144.92	93.63	-429.34	-2,544.83	603.77	432.24	171.53	3.520		
10,200.00	7,001.76	6,965.03	7,001.76	41.93	144.87	93.00	-429.34	-2,544.83	507.73	335.58	172.15	2.949		
10,300.00	7,000.09	6,963.34	7,000.07	42.81	144.82	92.37	-429.34	-2,544.83	413.56	240.33	173.24	2.387		
10,400.00	6,998.42	6,961.66	6,998.42	43.70	144.78	91.79	-431.45	-2,544.83	321.89	146.69	175.20	1.837	Collision Risk Procedures Req.	
10,500.00	6,996.75	6,959.99	6,996.75	44.61	144.73	91.16	-431.45	-2,544.83	238.44	59.21	179.23	1.330	Collision Risk Procedures Req.	
10,600.00	6,995.08	6,958.32	6,995.08	45.52	144.68	90.53	-431.45	-2,544.83	173.46	-12.92	186.38	0.931	Collision Risk Procedures Req.	
10,683.86	6,993.69	6,956.92	6,993.69	46.29	144.65	90.00	-431.45	-2,544.83	151.85	-39.09	190.94	0.795	Collision Risk Procedures Req., CC, E'	
10,700.00	6,993.42	6,956.65	6,993.42	46.44	144.64	89.90	-431.45	-2,544.83	152.70	-38.20	190.90	0.800	Collision Risk Procedures Req.	
10,800.00	6,991.75	6,954.99	6,991.75	47.37	144.59	89.27	-431.45	-2,544.83	191.16	5.88	185.28	1.032	Collision Risk Procedures Req.	
10,900.00	6,990.08	6,953.32	6,990.08	48.31	144.54	88.64	-431.45	-2,544.83	264.12	84.84	179.29	1.473	Collision Risk Procedures Req.	
11,000.00	6,988.41	6,951.65	6,988.41	49.26	144.50	88.01	-431.45	-2,544.83	350.68	174.80	175.88	1.994	Collision Risk Procedures Req.	
11,100.00	6,986.74	6,949.98	6,986.74	50.22	144.45	87.38	-431.45	-2,544.83	442.92	268.93	174.00	2.546		
11,200.00	6,985.07	6,948.31	6,985.07	51.18	144.40	86.75	-431.45	-2,544.83	537.94	365.05	172.89	3.111		
11,300.00	6,983.40	6,946.64	6,983.40	52.15	144.36	86.13	-431.45	-2,544.83	634.49	462.30	172.19	3.685		
11,400.00	6,981.73	6,944.97	6,981.73	53.12	144.31	85.50	-431.45	-2,544.83	731.96	560.25	171.72	4.263		
11,500.00	6,980.06	6,943.30	6,980.06	54.10	144.27	84.87	-431.45	-2,544.83	830.03	658.65	171.39	4.843		
11,600.00	6,978.39	6,941.63	6,978.39	55.09	144.22	84.25	-431.45	-2,544.83	928.51	757.37	171.14	5.425		
11,700.00	6,976.72	6,939.96	6,976.72	56.08	144.17	83.63	-431.45	-2,544.83	1,027.28	856.33	170.95	6.009		
11,800.00	6,975.06	6,938.29	6,975.06	57.08	144.13	83.01	-431.45	-2,544.83	1,126.27	955.46	170.81	6.594		
11,900.00	6,973.39	6,936.63	6,973.39	58.08	144.08	82.39	-431.45	-2,544.83	1,225.41	1,054.72	170.69	7.179		
12,000.00	6,971.72	6,934.96	6,971.72	59.09	144.03	81.77	-431.45	-2,544.83	1,324.69	1,154.09	170.60	7.765		
12,100.00	6,970.05	6,933.29	6,970.05	60.10	143.99	81.15	-431.45	-2,544.83	1,424.06	1,253.54	170.52	8.351		
12,200.00	6,968.38	6,931.62	6,968.38	61.11	143.94	80.54	-431.45	-2,544.83	1,523.51	1,353.06	170.45	8.938		
12,300.00	6,966.71	6,929.95	6,966.71	62.13	143.89	79.93	-431.45	-2,544.83	1,623.03	1,452.64	170.40	9.525		
12,400.00	6,965.04	6,928.28	6,965.04	63.15	143.85	79.32	-431.45	-2,544.83	1,722.61	1,552.26	170.35	10.112		
12,500.00	6,963.37	6,926.61	6,963.37	64.18	143.80	78.71	-431.45	-2,544.83	1,822.22	1,651.92	170.31	10.700		
12,600.00	6,961.70	6,924.94	6,961.70	65.21	143.75	78.11	-431.45	-2,544.83	1,921.88	1,751.61	170.27	11.287		
12,700.00	6,960.03	6,923.27	6,960.03	66.24	143.71	77.51	-431.45	-2,544.83	2,021.57	1,851.33	170.24	11.875		
12,800.00	6,958.36	6,921.60	6,958.36	67.27	143.66	76.91	-431.45	-2,544.83	2,121.29	1,951.07	170.21	12.463		
12,900.00	6,956.69	6,919.93	6,956.69	68.31	143.61	76.31	-431.45	-2,544.83	2,221.03	2,050.84	170.19	13.050		
13,000.00	6,955.03	6,918.26	6,955.03	69.35	143.57	75.72	-431.45	-2,544.83	2,320.79	2,150.62	170.17	13.638		
13,100.00	6,953.36	6,916.60	6,953.36	70.40	143.52	75.13	-431.45	-2,544.83	2,420.57	2,250.42	170.15	14.226		

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 203H
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 203H	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
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	0.30	0.00	0.00	0.00	8.89	2,073.10	324.30	2,098.31					
100.00	100.00	104.72	104.42	0.25	0.28	8.89	2,072.58	324.29	2,097.80	2,097.27	0.53	3,964.794		
111.80	111.80	112.10	111.80	0.29	0.30	8.89	2,072.57	324.32	2,097.79	2,097.19	0.60	3,514.113	CC, ES	
200.00	200.00	164.30	163.99	0.61	0.48	8.91	2,072.88	324.83	2,098.49	2,097.39	1.10	1,913.808		
300.00	300.00	250.81	250.49	0.97	0.79	8.92	2,074.45	325.57	2,100.42	2,098.67	1.76	1,195.383		
400.00	400.00	360.72	360.36	1.33	1.17	8.91	2,077.20	325.58	2,102.94	2,100.43	2.50	840.991		
500.00	500.00	449.36	448.98	1.68	1.49	8.92	2,078.75	326.44	2,104.84	2,101.67	3.17	663.190		
600.00	600.00	540.18	539.76	2.04	1.81	8.96	2,080.99	327.94	2,107.54	2,103.68	3.86	546.525		
700.00	699.98	636.30	635.83	2.39	2.16	-110.34	2,083.65	329.66	2,111.15	2,106.61	4.55	464.443		
800.00	799.84	742.88	742.35	2.73	2.54	-110.35	2,086.51	331.71	2,115.92	2,110.66	5.27	401.782		
900.00	899.45	854.31	853.74	3.08	2.94	-110.44	2,088.94	333.89	2,121.43	2,115.42	6.01	352.982		
1,000.00	998.70	966.81	966.21	3.42	3.34	-110.64	2,090.78	335.56	2,127.59	2,120.83	6.76	314.604		
1,100.00	1,097.47	1,069.55	1,068.92	3.78	3.70	-110.87	2,091.97	337.46	2,134.62	2,127.13	7.48	285.225		
1,200.00	1,195.62	1,170.75	1,170.05	4.14	4.07	-111.11	2,092.77	341.00	2,142.84	2,134.64	8.20	261.185		
1,300.00	1,293.06	1,271.00	1,270.15	4.51	4.42	-111.35	2,093.20	346.46	2,152.33	2,143.40	8.93	241.125		
1,349.92	1,341.38	1,321.06	1,320.09	4.70	4.60	-111.48	2,093.28	349.94	2,157.54	2,148.25	9.29	232.275		
1,400.00	1,389.76	1,367.67	1,366.57	4.89	4.77	-111.68	2,093.33	353.44	2,162.98	2,153.34	9.64	224.356		
1,500.00	1,486.35	1,459.80	1,458.45	5.27	5.10	-112.10	2,093.63	360.22	2,174.12	2,163.78	10.34	210.190		
1,600.00	1,582.95	1,554.72	1,553.13	5.66	5.44	-112.53	2,094.21	366.98	2,185.64	2,174.58	11.06	197.621		
1,700.00	1,679.54	1,654.21	1,652.38	6.05	5.79	-112.98	2,094.82	373.80	2,197.28	2,185.48	11.80	186.282		
1,800.00	1,776.13	1,752.30	1,750.25	6.44	6.14	-113.43	2,095.40	380.22	2,208.99	2,196.46	12.53	176.325		
1,900.00	1,872.73	1,848.68	1,846.47	6.83	6.49	-113.88	2,096.06	385.84	2,220.88	2,207.62	13.26	167.543		
2,000.00	1,969.32	1,945.00	1,942.67	7.23	6.83	-114.35	2,096.84	390.74	2,232.97	2,218.99	13.98	159.683		
2,100.00	2,065.91	2,041.23	2,038.79	7.63	7.18	-114.83	2,097.71	394.98	2,245.28	2,230.57	14.71	152.613		
2,200.00	2,162.50	2,140.03	2,137.52	8.03	7.53	-115.33	2,098.66	398.75	2,257.77	2,242.32	15.45	146.128		
2,300.00	2,259.10	2,240.88	2,238.30	8.43	7.90	-115.84	2,099.50	402.35	2,270.30	2,254.10	16.20	140.168		
2,400.00	2,355.69	2,339.44	2,336.81	8.83	8.25	-116.35	2,100.22	405.44	2,282.87	2,265.94	16.93	134.808		
2,500.00	2,452.28	2,436.55	2,433.90	9.23	8.60	-116.87	2,100.94	407.32	2,295.61	2,277.95	17.67	129.947		
2,600.00	2,548.88	2,543.60	2,540.94	9.64	8.98	-117.45	2,101.59	408.59	2,308.39	2,289.96	18.43	125.229		
2,700.00	2,645.47	2,654.77	2,652.09	10.04	9.38	-118.04	2,101.59	410.48	2,320.80	2,301.59	19.22	120.775		
2,800.00	2,742.06	2,736.32	2,733.64	10.44	9.66	-118.49	2,101.64	411.27	2,333.45	2,313.57	19.88	117.401		
2,900.00	2,838.66	2,817.91	2,815.22	10.85	9.94	-118.96	2,102.18	410.56	2,346.90	2,326.37	20.53	114.293		
3,000.00	2,935.25	2,917.69	2,914.98	11.26	10.27	-119.56	2,103.19	408.56	2,360.95	2,339.69	21.25	111.091		
3,100.00	3,031.84	3,025.66	3,022.94	11.66	10.63	-120.18	2,103.83	407.34	2,374.80	2,352.80	22.00	107.952		
3,200.00	3,128.44	3,119.35	3,116.62	12.07	10.95	-120.71	2,104.20	406.61	2,388.68	2,365.99	22.69	105.255		
3,300.00	3,225.03	3,212.17	3,209.44	12.47	11.26	-121.23	2,104.68	405.52	2,402.92	2,379.53	23.39	102.751		
3,400.00	3,321.62	3,329.05	3,326.31	12.88	11.66	-121.88	2,104.90	403.98	2,417.08	2,392.91	24.16	100.024		
3,500.00	3,418.22	3,416.00	3,413.25	13.29	11.95	-122.37	2,104.81	402.87	2,431.17	2,406.33	24.83	97.901		
3,600.00	3,514.81	3,504.00	3,501.24	13.70	12.25	-122.85	2,105.08	401.54	2,445.87	2,420.36	25.50	95.899		
3,700.00	3,611.40	3,595.70	3,592.93	14.10	12.56	-123.36	2,105.56	400.01	2,461.01	2,434.82	26.19	93.961		
3,800.00	3,708.00	3,689.41	3,686.62	14.51	12.88	-123.87	2,106.18	398.36	2,476.52	2,449.63	26.89	92.108		
3,900.00	3,804.59	3,787.19	3,784.38	14.92	13.22	-124.39	2,106.86	396.77	2,492.25	2,464.65	27.60	90.304	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 203H
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 203H	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 +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	0.54	180.00	1.70	180.01				
100.00	100.00	100.32	100.32	0.25	0.13	0.59	179.93	1.86	179.94	179.56	0.38	475.876	
181.71	181.71	181.72	181.72	0.54	0.40	0.76	179.53	2.40	179.54	178.60	0.94	190.704	CC
200.00	200.00	198.88	198.87	0.61	0.46	0.79	179.59	2.49	179.61	178.54	1.07	168.235	
300.00	300.00	299.53	299.51	0.97	0.82	1.22	179.94	3.84	179.98	178.20	1.78	100.915	
400.00	400.00	399.15	399.11	1.33	1.17	1.87	180.54	5.91	180.63	178.14	2.50	72.307	
500.00	500.00	499.18	499.12	1.68	1.53	2.62	180.90	8.27	181.09	177.88	3.22	56.326	
600.00	600.00	599.05	598.96	2.04	1.89	3.19	181.33	10.12	181.62	177.69	3.93	46.197	ES
700.00	699.98	699.07	698.97	2.39	2.25	-116.13	181.83	11.72	182.97	178.34	4.64	39.469	
800.00	799.84	797.99	797.88	2.73	2.60	-117.05	182.44	13.26	186.01	180.68	5.33	34.903	
900.00	899.45	895.60	895.45	3.08	2.95	-118.58	183.90	15.44	191.64	185.62	6.02	31.816	
1,000.00	998.70	992.48	992.20	3.42	3.30	-120.18	186.51	19.76	200.33	193.61	6.72	29.814	
1,100.00	1,097.47	1,088.62	1,088.04	3.78	3.64	-121.78	190.44	26.08	212.32	204.90	7.42	28.632	
1,200.00	1,195.62	1,183.31	1,182.28	4.14	3.98	-123.46	195.85	33.61	227.89	219.79	8.11	28.110	
1,300.00	1,293.06	1,276.64	1,274.96	4.51	4.32	-125.20	202.93	41.92	247.43	238.63	8.79	28.139	
1,349.92	1,341.38	1,322.44	1,320.37	4.70	4.48	-126.07	207.08	46.20	258.72	249.59	9.13	28.329	
1,400.00	1,389.76	1,367.82	1,365.30	4.89	4.64	-127.06	211.72	50.63	270.92	261.45	9.47	28.617	
1,500.00	1,486.35	1,458.02	1,454.38	5.27	4.97	-128.63	222.49	59.90	297.05	286.92	10.13	29.329	
1,600.00	1,582.95	1,549.90	1,544.83	5.66	5.30	-129.84	235.21	69.72	325.09	314.29	10.80	30.102	
1,700.00	1,679.54	1,643.00	1,636.36	6.05	5.63	-130.83	248.96	79.79	354.10	342.62	11.48	30.841	
1,800.00	1,776.13	1,736.56	1,728.31	6.44	5.97	-131.72	263.25	89.49	383.77	371.60	12.17	31.539	
1,900.00	1,872.73	1,831.66	1,821.78	6.83	6.31	-132.54	277.99	99.03	413.80	400.93	12.87	32.159	
2,000.00	1,969.32	1,928.13	1,916.61	7.23	6.66	-133.25	292.79	108.75	443.74	430.16	13.58	32.681	
2,100.00	2,065.91	2,024.62	2,011.50	7.63	7.01	-133.89	307.29	118.45	473.46	459.17	14.29	33.131	
2,200.00	2,162.50	2,121.54	2,106.87	8.03	7.37	-134.46	321.62	128.20	502.98	487.98	15.01	33.516	
2,300.00	2,259.10	2,215.57	2,199.40	8.43	7.71	-134.95	335.39	137.65	532.44	516.73	15.70	33.903	
2,400.00	2,355.69	2,310.41	2,292.69	8.83	8.06	-135.40	349.60	147.11	562.24	545.83	16.41	34.265	
2,500.00	2,452.28	2,407.18	2,387.90	9.23	8.42	-135.81	363.99	156.79	591.97	574.85	17.13	34.563	
2,600.00	2,548.88	2,504.07	2,483.23	9.64	8.77	-136.17	378.19	166.65	621.48	603.63	17.85	34.821	
2,700.00	2,645.47	2,601.50	2,579.13	10.04	9.13	-136.51	392.24	176.64	650.76	632.19	18.57	35.039	
2,800.00	2,742.06	2,700.58	2,676.70	10.44	9.50	-136.82	406.11	186.80	679.69	660.38	19.31	35.200	
2,900.00	2,838.66	2,799.33	2,774.10	10.85	9.86	-137.18	419.25	196.39	708.16	688.12	20.04	35.332	
3,000.00	2,935.25	2,893.45	2,867.00	11.26	10.21	-137.52	431.53	205.22	736.54	715.80	20.74	35.505	
3,100.00	3,031.84	2,988.37	2,960.66	11.66	10.56	-137.84	444.13	214.09	765.15	743.69	21.45	35.668	
3,200.00	3,128.44	3,086.05	3,057.07	12.07	10.92	-138.15	456.99	223.11	793.71	771.53	22.18	35.788	
3,300.00	3,225.03	3,185.84	3,155.66	12.47	11.29	-138.49	469.58	231.93	821.94	799.02	22.92	35.864	
3,400.00	3,321.62	3,277.63	3,246.37	12.88	11.62	-138.78	481.13	240.00	850.17	826.57	23.60	36.018	
3,500.00	3,418.22	3,370.55	3,338.07	13.29	11.97	-139.02	493.41	248.58	878.85	854.55	24.30	36.169	
3,600.00	3,514.81	3,467.61	3,433.86	13.70	12.32	-139.25	506.28	257.48	907.59	882.57	25.02	36.272	
3,700.00	3,611.40	3,565.60	3,530.66	14.10	12.69	-139.51	518.93	266.05	936.18	910.43	25.75	36.356	
3,800.00	3,708.00	3,663.54	3,627.49	14.51	13.05	-139.79	531.12	274.21	964.53	938.05	26.48	36.428	
3,900.00	3,804.59	3,760.99	3,723.89	14.92	13.40	-140.06	542.98	282.10	992.73	965.53	27.20	36.496	
4,000.00	3,901.18	3,859.75	3,821.65	15.33	13.77	-140.35	554.69	289.86	1,020.75	992.82	27.93	36.543	
4,100.00	3,997.78	3,951.39	3,912.37	15.74	14.10	-140.60	565.45	296.98	1,048.73	1,020.11	28.62	36.648	
4,200.00	4,094.37	4,047.21	4,007.15	16.15	14.45	-140.83	577.28	304.73	1,077.14	1,047.82	29.33	36.726	
4,300.00	4,190.96	4,146.55	4,105.46	16.55	14.82	-141.07	589.16	312.59	1,105.30	1,075.23	30.07	36.763	
4,400.00	4,287.56	4,245.52	4,203.49	16.96	15.18	-141.32	600.52	320.05	1,133.19	1,102.39	30.80	36.795	
4,500.00	4,384.15	4,344.89	4,302.02	17.37	15.54	-141.60	611.41	327.01	1,160.83	1,129.30	31.53	36.816	
4,600.00	4,480.74	4,445.00	4,401.36	17.78	15.91	-141.90	621.84	333.59	1,188.19	1,155.93	32.27	36.824	
4,700.00	4,577.34	4,546.95	4,502.62	18.19	16.28	-142.21	631.86	339.96	1,215.19	1,182.17	33.01	36.809	
4,800.00	4,673.93	4,642.35	4,597.42	18.60	16.62	-142.52	640.87	345.64	1,241.99	1,208.27	33.72	36.835	
4,900.00	4,770.52	4,737.39	4,691.89	19.01	16.97	-142.82	649.80	351.02	1,268.91	1,234.49	34.42	36.867	

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 203H
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 203H	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)			
5,000.00	4,867.12	4,834.83	4,788.78	19.42	17.32	-143.13	658.81	356.23	1,295.85	1,260.71	35.13	36.883	
5,100.00	4,963.71	4,936.85	4,890.25	19.83	17.69	-143.46	667.83	361.52	1,322.53	1,286.65	35.88	36.863	
5,200.00	5,060.30	5,036.77	4,989.70	20.24	18.05	-143.79	676.26	366.36	1,349.04	1,312.43	36.61	36.853	
5,300.00	5,156.90	5,171.48	5,124.00	20.65	18.53	-144.28	684.85	372.31	1,373.99	1,336.45	37.53	36.608	
5,400.00	5,253.49	5,317.50	5,269.89	21.06	19.04	-144.97	688.22	376.92	1,396.03	1,357.55	38.48	36.283	
5,500.00	5,350.08	5,407.97	5,360.34	21.47	19.35	-145.47	688.26	378.56	1,416.74	1,377.60	39.14	36.201	
5,600.00	5,446.68	5,502.77	5,455.12	21.88	19.68	-145.97	688.47	380.31	1,437.71	1,397.90	39.81	36.110	
5,612.36	5,458.62	5,514.61	5,466.96	21.93	19.72	-146.03	688.50	380.54	1,440.32	1,400.42	39.90	36.099	
5,700.00	5,543.60	5,598.86	5,551.20	22.28	20.01	-146.63	688.80	382.09	1,457.80	1,417.30	40.50	35.994	
5,800.00	5,641.32	5,696.40	5,648.71	22.68	20.35	-147.20	689.20	383.85	1,475.21	1,434.02	41.19	35.813	
5,900.00	5,739.72	5,800.24	5,752.54	23.06	20.71	-147.67	689.48	385.83	1,489.60	1,447.69	41.91	35.541	
6,000.00	5,838.69	5,900.72	5,853.00	23.43	21.06	-148.02	689.36	387.75	1,500.76	1,458.15	42.61	35.220	
6,100.00	5,938.09	5,990.66	5,942.92	23.79	21.37	-148.27	689.46	389.09	1,509.39	1,466.13	43.26	34.894	
6,200.00	6,037.81	6,082.48	6,034.74	24.13	21.69	-148.43	689.88	389.94	1,515.65	1,471.74	43.91	34.518	
6,300.00	6,137.73	6,175.72	6,127.98	24.46	22.01	-148.52	690.49	390.25	1,519.40	1,474.83	44.56	34.095	
6,362.28	6,200.00	6,232.23	6,184.49	24.66	22.21	-29.19	690.90	390.03	1,520.49	1,475.54	44.95	33.825	
6,400.00	6,237.72	6,268.48	6,220.74	24.78	22.33	-29.20	691.17	389.69	1,520.91	1,475.71	45.19	33.654	
6,500.00	6,337.72	7,627.97	7,075.27	25.08	27.32	4.23	632.13	1,225.53	1,470.36	1,424.38	45.99	31.973	
6,600.00	6,437.72	7,628.72	7,075.28	25.38	27.33	4.27	632.07	1,226.28	1,422.84	1,375.35	47.48	29.965	
6,700.00	6,537.72	7,629.47	7,075.29	25.69	27.33	4.30	632.01	1,227.02	1,380.92	1,331.99	48.93	28.223	
6,731.88	6,569.60	7,629.71	7,075.30	25.79	27.33	4.31	631.99	1,227.26	1,368.83	1,319.45	49.37	27.724	
6,750.00	6,587.72	7,629.65	7,075.29	25.84	27.33	94.33	631.99	1,227.20	1,362.26	1,312.64	49.62	27.454	
6,775.00	6,612.66	7,628.93	7,075.29	25.91	27.33	95.39	632.05	1,226.48	1,353.62	1,303.68	49.95	27.102	
6,800.00	6,637.49	7,627.47	7,075.27	25.98	27.32	96.35	632.17	1,225.03	1,345.51	1,295.25	50.26	26.772	
6,825.00	6,662.13	7,625.28	7,075.24	26.05	27.31	97.20	632.35	1,222.84	1,337.95	1,287.40	50.56	26.465	
6,850.00	6,686.52	7,622.36	7,075.20	26.11	27.30	97.94	632.60	1,219.94	1,330.97	1,280.13	50.84	26.182	
6,875.00	6,710.59	7,618.73	7,075.15	26.17	27.29	98.57	632.91	1,216.32	1,324.58	1,273.48	51.10	25.922	
6,900.00	6,734.27	7,614.40	7,075.09	26.23	27.27	99.09	633.29	1,212.01	1,318.80	1,267.46	51.35	25.685	
6,925.00	6,757.50	7,609.37	7,075.02	26.29	27.25	99.51	633.75	1,207.00	1,313.65	1,262.07	51.57	25.472	
6,950.00	6,780.21	7,603.68	7,074.94	26.34	27.22	99.82	634.29	1,201.33	1,309.12	1,257.34	51.78	25.282	
6,975.00	6,802.35	7,577.99	7,074.56	26.39	27.12	99.28	636.96	1,175.78	1,305.49	1,253.59	51.90	25.153	
7,000.00	6,823.85	7,577.99	7,074.56	26.44	27.12	99.68	636.96	1,175.78	1,302.09	1,249.99	52.10	24.993	
7,025.00	6,844.65	7,588.46	7,074.66	26.49	27.10	100.39	635.79	1,186.19	1,299.34	1,247.02	52.32	24.836	
7,050.00	6,864.70	7,570.59	7,074.42	26.53	27.09	99.98	637.79	1,168.44	1,297.34	1,244.93	52.42	24.750	
7,075.00	6,883.94	7,552.40	7,073.83	26.58	27.02	99.52	639.84	1,150.38	1,295.85	1,243.34	52.50	24.681	
7,100.00	6,902.32	7,533.92	7,072.86	26.62	26.95	99.01	641.93	1,132.04	1,294.83	1,242.26	52.57	24.629	
7,125.00	6,919.79	7,515.18	7,071.50	26.65	26.87	98.46	644.07	1,113.46	1,294.27	1,241.64	52.63	24.592	
7,150.00	6,936.29	7,472.09	7,066.32	26.69	26.70	97.06	648.86	1,071.00	1,294.13	1,241.55	52.58	24.611	
7,151.38	6,937.17	7,503.58	7,070.43	26.69	26.83	98.09	645.34	1,101.99	1,294.10	1,241.40	52.71	24.553 SF	
7,175.00	6,951.79	7,471.93	7,066.92	26.72	26.70	97.07	649.01	1,070.75	1,294.39	1,241.71	52.68	24.571	
7,200.00	6,966.25	7,439.40	7,061.99	26.75	26.58	96.00	652.51	1,038.79	1,294.88	1,242.24	52.64	24.597	
7,225.00	6,979.61	7,407.76	7,055.91	26.78	26.45	94.96	655.65	1,007.90	1,295.54	1,242.94	52.60	24.630	
7,250.00	6,991.86	7,379.58	7,049.43	26.81	26.34	94.01	658.22	980.60	1,296.37	1,243.82	52.56	24.666	
7,275.00	7,002.94	7,355.96	7,043.18	26.84	26.25	93.19	660.27	957.91	1,297.42	1,244.89	52.52	24.703	
7,300.00	7,012.84	7,332.59	7,036.28	26.86	26.15	92.36	662.22	935.67	1,298.67	1,246.20	52.48	24.747	
7,325.00	7,021.52	7,309.46	7,028.72	26.88	26.06	91.54	664.07	913.89	1,300.12	1,247.69	52.43	24.799	
7,350.00	7,028.97	7,288.05	7,021.11	26.90	25.98	90.76	665.71	893.95	1,301.74	1,249.37	52.38	24.854	
7,375.00	7,035.15	7,269.83	7,014.16	26.92	25.90	90.06	667.10	877.16	1,303.57	1,251.23	52.34	24.908	
7,400.00	7,040.06	7,251.61	7,006.78	26.94	25.83	89.35	668.49	860.56	1,305.59	1,253.30	52.29	24.969	
7,425.00	7,043.68	7,233.37	6,998.96	26.95	25.76	88.64	669.89	844.14	1,307.78	1,255.55	52.24	25.035	
7,450.00	7,046.00	7,215.12	6,990.71	26.96	25.69	87.94	671.28	827.93	1,310.13	1,257.94	52.18	25.106	
7,475.00	7,047.01	7,198.99	6,983.07	26.97	25.63	87.28	672.52	813.77	1,312.61	1,260.47	52.14	25.175	

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 203H
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 203H	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)			
7,489.85	7,047.00	7,186.34	6,976.91	26.98	25.58	86.83	673.50	802.77	1,314.13	1,262.03	52.09	25.226	
7,500.00	7,046.83	7,179.08	6,973.34	26.98	25.55	86.67	674.06	796.48	1,315.20	1,263.13	52.07	25.257	
7,600.00	7,045.16	7,109.74	6,937.61	27.05	25.29	85.18	679.75	737.34	1,327.31	1,275.43	51.88	25.583	
7,700.00	7,043.49	7,032.36	6,893.63	27.15	25.01	83.35	686.01	673.99	1,342.14	1,290.48	51.66	25.978	
7,800.00	7,041.82	6,963.64	6,849.92	27.31	24.77	81.54	690.74	621.21	1,359.80	1,308.30	51.50	26.405	
7,900.00	7,040.15	6,903.82	6,807.71	27.51	24.56	79.80	693.98	578.97	1,381.02	1,329.63	51.39	26.873	
8,000.00	7,038.48	6,847.71	6,764.95	27.76	24.36	78.06	696.01	542.73	1,406.17	1,354.87	51.30	27.408	
8,100.00	7,036.81	6,802.35	6,728.37	28.06	24.20	76.58	696.88	515.93	1,435.61	1,384.31	51.30	27.985	
8,200.00	7,035.14	6,765.38	6,697.39	28.40	24.07	75.33	697.21	495.77	1,469.67	1,418.31	51.36	28.615	
8,300.00	7,033.48	6,726.99	6,664.21	28.79	23.94	74.00	697.22	476.46	1,508.38	1,456.98	51.41	29.343	
8,400.00	7,031.81	6,726.99	6,664.21	29.22	23.94	74.00	697.22	476.46	1,551.84	1,500.09	51.75	29.987	
8,500.00	7,030.14	6,684.49	6,626.40	29.70	23.79	72.51	696.96	457.08	1,599.19	1,547.45	51.75	30.904	
8,600.00	7,028.47	6,664.20	6,607.98	30.21	23.71	71.79	696.78	448.58	1,650.91	1,599.00	51.90	31.808	
8,700.00	7,026.80	6,631.99	6,578.29	30.75	23.60	70.64	696.42	436.10	1,706.58	1,654.62	51.95	32.848	
8,800.00	7,025.13	6,631.99	6,578.29	31.33	23.60	70.64	696.42	436.10	1,765.51	1,713.29	52.22	33.808	
8,900.00	7,023.46	6,631.99	6,578.29	31.94	23.60	70.64	696.42	436.10	1,828.02	1,775.56	52.46	34.849	
9,000.00	7,021.79	6,631.99	6,578.29	32.58	23.60	70.64	696.42	436.10	1,893.74	1,841.09	52.66	35.962	
9,100.00	7,020.12	6,591.89	6,540.60	33.25	23.45	69.19	695.82	422.45	1,961.13	1,908.52	52.61	37.277	
9,200.00	7,018.45	6,581.50	6,530.70	33.94	23.42	68.82	695.64	419.28	2,031.62	1,978.90	52.72	38.535	
9,300.00	7,016.78	6,572.00	6,521.61	34.66	23.38	68.48	695.46	416.51	2,104.35	2,051.53	52.82	39.838	
9,400.00	7,015.11	6,537.99	6,488.78	35.39	23.26	67.25	694.73	407.67	2,179.62	2,126.84	52.78	41.296	
9,500.00	7,013.45	6,537.99	6,488.78	36.15	23.26	67.25	694.73	407.67	2,255.97	2,203.06	52.91	42.638	
9,600.00	7,011.78	6,537.99	6,488.78	36.93	23.26	67.25	694.73	407.67	2,334.10	2,281.08	53.02	44.022	
9,700.00	7,010.11	6,537.99	6,488.78	37.72	23.26	67.25	694.73	407.67	2,413.85	2,360.73	53.12	45.443	
9,800.00	7,008.44	6,537.99	6,488.78	38.54	23.26	67.25	694.73	407.67	2,495.06	2,441.86	53.20	46.896	

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

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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		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	0.53	150.00	1.40	150.01				
100.00	100.00	99.54	99.54	0.25	0.13	0.70	150.11	1.83	150.12	149.74	0.38	396.446	
200.00	200.00	198.76	198.75	0.61	0.42	1.18	150.67	3.09	150.71	149.68	1.03	146.849	
300.00	300.00	298.48	298.46	0.97	0.77	1.53	151.60	4.04	151.66	149.92	1.74	87.083	
400.00	400.00	398.32	398.29	1.33	1.13	2.01	152.29	5.34	152.40	149.94	2.46	62.010	
500.00	500.00	498.70	498.66	1.68	1.49	2.38	153.20	6.36	153.34	150.17	3.18	48.287	
600.00	600.00	598.64	598.59	2.04	1.85	2.77	154.04	7.46	154.22	150.33	3.89	39.623	
700.00	699.98	698.36	698.30	2.39	2.21	-116.74	154.97	8.55	155.99	151.39	4.60	33.941	
800.00	799.84	798.11	798.03	2.73	2.56	-117.95	156.06	9.72	159.53	154.24	5.29	30.140	
900.00	899.45	900.27	900.17	3.08	2.93	-119.86	156.63	11.91	164.33	158.33	6.00	27.382	
1,000.00	998.70	1,003.93	1,003.74	3.42	3.29	-122.20	155.01	15.76	168.97	162.25	6.71	25.170	
1,100.00	1,097.47	1,108.98	1,108.57	3.78	3.66	-125.16	150.49	20.82	173.03	165.61	7.42	23.309	
1,200.00	1,195.62	1,214.30	1,213.44	4.14	4.03	-129.06	142.36	26.00	176.29	168.16	8.13	21.695	
1,300.00	1,293.06	1,317.65	1,316.07	4.51	4.39	-133.97	131.07	30.54	179.69	170.87	8.82	20.373	
1,349.92	1,341.38	1,368.08	1,366.06	4.70	4.57	-136.63	124.80	32.79	182.06	172.90	9.17	19.863	
1,400.00	1,389.76	1,418.93	1,416.41	4.89	4.75	-139.34	118.13	35.22	184.78	175.27	9.51	19.426	
1,500.00	1,486.35	1,521.95	1,518.18	5.27	5.12	-144.55	103.20	40.87	189.82	179.62	10.20	18.608	
1,600.00	1,582.95	1,625.54	1,620.03	5.66	5.49	-149.47	85.73	47.99	193.48	182.60	10.89	17.773	
1,700.00	1,679.54	1,726.52	1,718.97	6.05	5.86	-154.12	67.06	55.73	196.63	185.05	11.58	16.978	
1,800.00	1,776.13	1,826.31	1,816.60	6.44	6.23	-158.57	48.02	63.78	200.29	188.00	12.28	16.305	
1,900.00	1,872.73	1,925.18	1,913.25	6.83	6.60	-162.79	28.92	72.01	204.75	191.76	12.99	15.757	
2,000.00	1,969.32	2,023.65	2,009.55	7.23	6.97	-166.78	10.02	80.15	210.42	196.71	13.71	15.348	
2,100.00	2,065.91	2,122.24	2,105.97	7.63	7.34	-170.59	-8.93	88.16	217.18	202.75	14.43	15.049	
2,200.00	2,162.50	2,220.71	2,202.27	8.03	7.71	-174.20	-27.96	95.96	224.95	209.79	15.16	14.838	
2,300.00	2,259.10	2,320.05	2,299.42	8.43	8.09	-177.58	-47.16	103.87	233.53	217.64	15.89	14.692	
2,400.00	2,355.69	2,421.07	2,398.16	8.83	8.48	179.35	-66.52	112.72	242.26	225.63	16.64	14.562	
2,500.00	2,452.28	2,521.02	2,495.83	9.23	8.86	176.70	-85.40	122.47	250.84	233.46	17.38	14.431	
2,600.00	2,548.88	2,619.61	2,592.12	9.64	9.24	174.21	-104.24	132.10	259.82	241.69	18.13	14.329	
2,700.00	2,645.47	2,718.12	2,688.31	10.04	9.63	171.82	-123.32	141.42	269.45	250.56	18.89	14.265	
2,800.00	2,742.06	2,818.29	2,786.12	10.44	10.01	169.57	-142.67	151.06	279.38	259.73	19.65	14.217	
2,900.00	2,838.66	2,919.03	2,884.46	10.85	10.41	167.57	-161.89	161.47	289.10	268.68	20.42	14.159	
3,000.00	2,935.25	3,017.82	2,980.88	11.26	10.79	165.74	-180.72	171.89	298.95	277.76	21.18	14.111	
3,100.00	3,031.84	3,116.56	3,077.20	11.66	11.18	163.97	-199.87	182.14	309.15	287.19	21.96	14.081	
3,200.00	3,128.44	3,214.56	3,172.81	12.07	11.56	162.29	-218.97	192.05	319.87	297.14	22.73	14.075	
3,300.00	3,225.03	3,311.63	3,267.62	12.47	11.94	160.80	-237.46	201.58	331.23	307.74	23.49	14.100	
3,400.00	3,321.62	3,408.23	3,362.31	12.88	12.31	159.67	-254.29	210.68	343.48	319.23	24.25	14.164	
3,500.00	3,418.22	3,505.13	3,457.64	13.29	12.68	158.92	-269.24	219.49	356.49	331.49	25.00	14.261	
3,600.00	3,514.81	3,602.76	3,554.03	13.70	13.05	158.55	-282.10	228.22	370.05	344.31	25.74	14.377	
3,700.00	3,611.40	3,693.65	3,643.95	14.10	13.40	158.39	-292.99	235.64	384.58	358.15	26.43	14.551	
3,800.00	3,708.00	3,783.95	3,733.73	14.51	13.73	158.62	-300.85	241.17	401.57	374.48	27.09	14.822	
3,900.00	3,804.59	3,877.68	3,827.22	14.92	14.06	159.30	-305.55	245.92	420.16	392.40	27.76	15.136	
4,000.00	3,901.18	3,968.31	3,917.73	15.33	14.38	160.20	-307.82	249.92	439.89	411.51	28.38	15.499	
4,100.00	3,997.78	4,056.11	4,005.48	15.74	14.69	160.94	-310.04	251.92	461.74	432.77	28.98	15.935	
4,200.00	4,094.37	4,147.96	4,097.32	16.15	15.01	161.80	-310.87	252.57	485.49	455.89	29.60	16.402	
4,300.00	4,190.96	4,244.54	4,193.90	16.55	15.34	162.66	-311.38	253.05	509.63	479.36	30.27	16.835	
4,400.00	4,287.56	4,340.21	4,289.56	16.96	15.67	163.47	-311.53	253.52	533.97	503.04	30.93	17.263	
4,500.00	4,384.15	4,435.66	4,385.01	17.37	15.98	164.25	-311.30	253.81	558.66	527.07	31.58	17.689	
4,600.00	4,480.74	4,531.74	4,481.09	17.78	16.30	165.01	-310.54	254.10	583.58	551.35	32.23	18.107	
4,700.00	4,577.34	4,628.10	4,577.45	18.19	16.61	165.73	-309.62	254.39	608.63	575.75	32.88	18.510	
4,800.00	4,673.93	4,724.25	4,673.59	18.60	16.92	166.40	-308.62	254.66	633.81	600.28	33.53	18.901	
4,900.00	4,770.52	4,818.96	4,768.29	19.01	17.22	167.05	-307.26	254.91	659.20	625.03	34.17	19.292	
5,000.00	4,867.12	4,914.07	4,863.38	19.42	17.53	167.67	-305.46	254.99	684.95	650.14	34.81	19.676	

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 203H
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 203H	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							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	4,963.71	5,009.17	4,958.46	19.83	17.84	168.28	-303.39	255.03	710.91	675.46	35.46	20.051		
5,200.00	5,060.30	5,105.39	5,054.65	20.24	18.15	168.86	-301.05	255.00	737.07	700.96	36.11	20.411		
5,300.00	5,156.90	5,201.65	5,150.88	20.65	18.46	169.43	-298.49	255.11	763.26	726.49	36.77	20.758		
5,400.00	5,253.49	5,294.98	5,244.17	21.06	18.76	169.95	-295.90	255.10	789.64	752.24	37.40	21.113		
5,500.00	5,350.08	5,385.15	5,334.29	21.47	19.06	170.45	-292.78	254.77	816.64	778.64	38.00	21.490		
5,600.00	5,446.68	5,478.76	5,427.80	21.88	19.36	170.99	-288.61	254.13	844.33	805.69	38.64	21.854		
5,612.36	5,458.62	5,490.73	5,439.76	21.93	19.40	171.06	-288.09	254.04	847.75	809.04	38.72	21.896		
5,700.00	5,543.60	5,575.99	5,524.94	22.28	19.68	171.56	-284.52	253.42	870.76	831.45	39.30	22.154		
5,800.00	5,641.32	5,676.41	5,625.30	22.68	20.00	172.05	-280.76	252.72	893.73	853.73	40.00	22.343		
5,900.00	5,739.72	5,779.18	5,728.02	23.06	20.34	172.43	-277.79	252.20	912.87	872.15	40.72	22.419		
6,000.00	5,838.69	5,882.92	5,831.73	23.43	20.68	172.71	-275.67	251.91	928.11	886.66	41.44	22.395		
6,100.00	5,938.09	5,987.03	5,935.84	23.79	21.03	172.85	-275.05	251.66	939.34	897.17	42.17	22.276		
6,200.00	6,037.81	6,096.87	6,045.67	24.13	21.39	172.87	-276.00	251.30	946.69	903.74	42.95	22.044		
6,300.00	6,137.73	7,137.78	6,858.87	24.46	25.53	143.03	-723.44	548.08	931.39	893.98	37.41	24.899		
6,362.28	6,200.00	7,179.13	6,881.08	24.66	25.70	-100.67	-740.67	578.39	883.62	845.82	37.80	23.376		
6,400.00	6,237.72	7,206.50	6,896.22	24.78	25.82	-102.08	-750.40	599.00	854.56	816.60	37.96	22.512		
6,500.00	6,337.72	7,287.05	6,942.10	25.08	26.14	-106.01	-771.21	661.76	777.31	739.23	38.08	20.413		
6,600.00	6,437.72	7,839.60	7,096.93	25.38	28.13	166.57	-813.47	1,173.90	683.88	660.37	23.51	29.087		
6,700.00	6,537.72	7,817.81	7,098.45	25.69	28.05	173.31	-812.00	1,152.21	587.95	563.35	24.60	23.904		
6,731.88	6,569.60	7,812.74	7,098.76	25.79	28.03	174.92	-811.59	1,147.17	557.62	532.59	25.02	22.283		
6,750.00	6,587.72	7,809.30	7,098.95	25.84	28.01	-101.14	-811.29	1,143.74	540.46	515.17	25.30	21.365		
6,775.00	6,612.66	7,802.27	7,099.31	25.91	27.99	-107.07	-810.63	1,136.76	516.96	491.24	25.72	20.097		
6,800.00	6,637.49	7,792.95	7,099.74	25.98	27.95	-111.69	-809.69	1,127.50	493.68	467.47	26.21	18.836		
6,825.00	6,662.13	7,781.66	7,100.16	26.05	27.91	-115.24	-808.41	1,116.29	470.68	443.92	26.76	17.588		
6,850.00	6,686.52	7,770.21	7,100.37	26.11	27.86	-118.24	-807.20	1,104.89	447.95	420.60	27.36	16.374		
6,875.00	6,710.59	7,754.30	7,100.75	26.17	27.80	-119.95	-804.74	1,089.18	425.58	397.51	28.07	15.164		
6,900.00	6,734.27	7,738.25	7,100.74	26.23	27.74	-121.30	-802.37	1,073.31	403.52	374.68	28.84	13.990		
6,925.00	6,757.50	7,722.08	7,100.33	26.29	27.68	-122.31	-800.11	1,057.30	381.83	352.13	29.70	12.858		
6,950.00	6,780.21	7,705.80	7,099.50	26.34	27.62	-123.00	-797.96	1,041.19	360.55	329.92	30.63	11.773		
6,975.00	6,802.35	7,689.44	7,098.25	26.39	27.56	-123.37	-795.93	1,025.00	339.72	308.08	31.63	10.739		
7,000.00	6,823.85	7,673.09	7,096.58	26.44	27.50	-123.45	-794.06	1,008.84	319.40	286.67	32.73	9.759		
7,025.00	6,844.65	7,656.49	7,094.49	26.49	27.44	-123.21	-792.25	992.48	299.67	265.75	33.91	8.837		
7,050.00	6,864.70	7,639.97	7,091.95	26.53	27.38	-122.68	-790.64	976.24	280.58	245.39	35.19	7.974		
7,075.00	6,883.94	7,623.51	7,088.98	26.58	27.32	-121.85	-789.23	960.11	262.25	225.68	36.56	7.172		
7,100.00	6,902.32	7,607.11	7,085.56	26.62	27.27	-120.71	-788.01	944.12	244.77	206.74	38.04	6.435		
7,125.00	6,919.79	7,590.76	7,081.72	26.65	27.21	-119.25	-787.00	928.25	228.30	188.68	39.61	5.763		
7,150.00	6,936.29	7,574.44	7,077.46	26.69	27.15	-117.46	-786.17	912.53	212.97	171.70	41.28	5.160		
7,175.00	6,951.79	7,558.26	7,072.80	26.72	27.10	-115.34	-785.55	897.04	198.98	155.99	43.00	4.628		
7,200.00	6,966.25	7,540.94	7,067.33	26.75	27.04	-112.57	-785.06	880.61	186.50	141.66	44.84	4.159		
7,225.00	6,979.61	7,523.86	7,061.44	26.78	26.98	-109.49	-784.71	864.59	175.70	129.08	46.62	3.769		
7,250.00	6,991.86	7,506.98	7,055.12	26.81	26.92	-106.08	-784.50	848.94	166.82	118.56	48.26	3.457		
7,275.00	7,002.94	7,490.30	7,048.41	26.84	26.87	-102.36	-784.42	833.67	160.05	110.41	49.64	3.224		
7,300.00	7,012.84	7,474.72	7,041.73	26.86	26.82	-98.63	-784.44	819.59	155.56	104.94	50.62	3.073		
7,325.00	7,021.52	7,455.04	7,032.76	26.88	26.75	-93.50	-784.56	802.08	153.37	101.97	51.40	2.984		
7,340.90	7,026.40	7,442.49	7,026.81	26.89	26.70	-90.16	-784.49	791.03	152.99	101.36	51.63	2.963 ES		
7,350.00	7,028.97	7,435.30	7,023.32	26.90	26.68	-88.23	-784.39	784.74	153.11	101.43	51.67	2.963 SF		
7,375.00	7,035.15	7,415.51	7,013.43	26.92	26.61	-82.90	-783.93	767.60	154.60	103.11	51.49	3.002		
7,400.00	7,040.06	7,395.68	7,003.10	26.94	26.54	-77.60	-783.17	750.70	157.62	106.67	50.95	3.094		
7,425.00	7,043.68	7,376.19	6,992.55	26.95	26.48	-72.51	-782.15	734.35	161.90	111.73	50.18	3.227		
7,450.00	7,046.00	7,352.26	6,979.21	26.96	26.39	-66.70	-780.34	714.56	166.99	117.84	49.15	3.398		
7,475.00	7,047.01	7,327.87	6,965.45	26.97	26.29	-61.22	-777.64	694.60	172.31	124.34	47.97	3.592		
7,489.85	7,047.00	7,313.21	6,957.11	26.98	26.24	-58.14	-775.60	682.72	175.47	128.24	47.23	3.715		

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 203H
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 203H	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		Offset Wellbore Centre		Rule Assigned:				Distance		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	Warning	
7,500.00	7,046.83	7,303.20	6,951.39	26.98	26.20	-56.32	-774.04	674.67	177.66	130.95	46.71	3.803		
7,600.00	7,045.16	7,199.70	6,892.43	27.05	25.79	-37.86	-748.10	593.84	202.81	162.24	40.57	4.999		
7,700.00	7,043.49	7,104.16	6,841.47	27.15	25.38	-21.37	-707.25	524.30	234.80	198.91	35.89	6.542		
7,800.00	7,041.82	7,033.20	6,806.27	27.31	25.08	-9.74	-667.79	477.03	277.80	241.44	36.36	7.639		
7,900.00	7,040.15	6,979.09	6,779.96	27.51	24.85	-1.65	-634.08	443.90	333.11	293.95	39.17	8.505		
8,000.00	7,038.48	6,938.52	6,759.12	27.76	24.68	3.63	-608.11	420.73	399.00	357.00	42.00	9.500		
8,100.00	7,036.81	6,894.99	6,735.19	28.06	24.50	8.45	-580.11	397.52	472.39	428.65	43.75	10.798		
8,200.00	7,035.14	6,873.25	6,722.52	28.40	24.41	10.52	-566.22	386.62	550.80	505.31	45.49	12.108		
8,300.00	7,033.48	6,847.95	6,706.96	28.79	24.30	12.63	-550.32	374.59	633.21	586.67	46.53	13.608		
8,400.00	7,031.81	6,806.99	6,679.96	29.22	24.13	15.43	-525.28	356.66	718.98	672.04	46.94	15.317		
8,500.00	7,030.14	6,806.99	6,679.96	29.70	24.13	15.43	-525.28	356.66	805.94	758.10	47.83	16.848		
8,600.00	7,028.47	6,778.91	6,660.38	30.21	24.02	16.96	-508.69	345.26	894.88	846.77	48.11	18.602		
8,700.00	7,026.80	6,755.12	6,643.27	30.75	23.92	18.05	-495.05	335.95	984.90	936.55	48.35	20.372		
8,800.00	7,025.13	6,712.99	6,611.82	31.33	23.74	19.58	-471.81	320.27	1,076.15	1,027.81	48.33	22.265		
8,900.00	7,023.46	6,712.99	6,611.82	31.94	23.74	19.58	-471.81	320.27	1,167.49	1,118.81	48.69	23.979		
9,000.00	7,021.79	6,712.99	6,611.82	32.58	23.74	19.58	-471.81	320.27	1,260.16	1,211.20	48.96	25.741		
9,100.00	7,020.12	6,675.57	6,582.70	33.25	23.59	20.59	-452.22	307.28	1,352.78	1,303.88	48.91	27.660		
9,200.00	7,018.45	6,659.07	6,569.52	33.94	23.52	20.94	-443.91	301.86	1,446.25	1,397.26	48.99	29.520		
9,300.00	7,016.78	6,617.99	6,535.85	34.66	23.35	21.61	-424.11	289.16	1,540.65	1,491.74	48.91	31.500		
9,400.00	7,015.11	6,617.99	6,535.85	35.39	23.35	21.61	-424.11	289.16	1,634.61	1,585.54	49.06	33.315		
9,500.00	7,013.45	6,617.99	6,535.85	36.15	23.35	21.61	-424.11	289.16	1,729.24	1,680.05	49.19	35.153		
9,600.00	7,011.78	6,617.99	6,535.85	36.93	23.35	21.61	-424.11	289.16	1,824.45	1,775.15	49.30	37.010		
9,700.00	7,010.11	6,617.99	6,535.85	37.72	23.35	21.61	-424.11	289.16	1,920.14	1,870.76	49.38	38.883		
9,800.00	7,008.44	6,581.87	6,505.30	38.54	23.21	22.00	-407.72	279.06	2,015.36	1,966.04	49.31	40.869		
9,900.00	7,006.77	6,571.93	6,496.75	39.36	23.17	22.08	-403.36	276.47	2,111.29	2,061.94	49.35	42.784		
10,000.00	7,005.10	6,562.55	6,488.62	40.20	23.13	22.15	-399.32	274.10	2,207.46	2,158.08	49.38	44.704		
10,100.00	7,003.43	6,523.99	6,454.68	41.06	22.97	22.32	-383.37	265.13	2,304.44	2,255.13	49.30	46.740		
10,200.00	7,001.76	6,523.99	6,454.68	41.93	22.97	22.32	-383.37	265.13	2,400.74	2,351.38	49.36	48.634		
10,300.00	7,000.09	6,523.99	6,454.68	42.81	22.97	22.32	-383.37	265.13	2,497.34	2,447.92	49.42	50.535		

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

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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						Rule Assigned:				Offset Well Error:	0.00 usft	
Measured Depth	Reference	Measured Depth	Offset	Reference	Semi Major Axis	Highside	Offset Wellbore Centre		Distance			Separation Factor	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)			
0.00	0.00	0.00	16.70	0.00	0.00	177.80	-2,088.50	80.20	2,090.11					
100.00	100.00	78.48	95.18	0.25	0.19	177.81	-2,088.57	79.99	2,090.11	2,089.67	0.44	4,769.867		
200.00	200.00	188.68	205.37	0.61	0.58	177.84	-2,088.88	78.96	2,090.38	2,089.19	1.19	1,755.507		
247.79	247.79	231.09	247.79	0.78	0.73	177.84	-2,088.82	78.88	2,090.31	2,088.80	1.51	1,386.192		
300.00	300.00	276.78	293.47	0.97	0.88	177.84	-2,088.86	78.79	2,090.36	2,088.51	1.85	1,128.933		
400.00	400.00	374.83	391.52	1.33	1.23	177.86	-2,089.04	77.98	2,090.51	2,087.95	2.56	816.972		
500.00	500.00	488.75	505.44	1.68	1.63	177.88	-2,088.75	77.41	2,090.19	2,086.87	3.32	630.418		
600.00	600.00	591.21	607.90	2.04	1.98	177.87	-2,088.43	77.52	2,089.88	2,085.86	4.03	518.900		
700.00	699.98	688.98	705.66	2.39	2.32	58.58	-2,088.06	77.67	2,088.60	2,083.89	4.71	443.095		
800.00	799.84	785.07	801.75	2.73	2.66	58.74	-2,087.89	77.73	2,085.70	2,080.32	5.39	387.076		
900.00	899.45	882.72	899.40	3.08	3.00	59.01	-2,087.85	78.06	2,081.15	2,075.08	6.07	342.779		
1,000.00	998.70	977.43	994.11	3.42	3.33	59.37	-2,087.91	78.88	2,074.97	2,068.22	6.75	307.433		
1,100.00	1,097.47	1,067.10	1,083.76	3.78	3.64	59.78	-2,088.24	80.91	2,067.40	2,059.98	7.42	278.798		
1,200.00	1,195.62	1,157.83	1,174.41	4.14	3.96	60.25	-2,088.97	84.47	2,058.60	2,050.51	8.09	254.431		
1,300.00	1,293.06	1,248.40	1,264.84	4.51	4.27	60.79	-2,089.99	89.45	2,048.53	2,039.76	8.77	233.519		
1,349.92	1,341.38	1,293.67	1,310.01	4.70	4.43	61.09	-2,090.64	92.36	2,043.05	2,033.94	9.12	224.131		
1,400.00	1,389.76	1,340.27	1,356.47	4.89	4.60	61.29	-2,091.37	95.80	2,037.45	2,027.98	9.46	215.271		
1,500.00	1,486.35	1,433.75	1,449.55	5.27	4.93	61.65	-2,093.01	104.32	2,026.52	2,016.35	10.17	199.314		
1,600.00	1,582.95	1,518.65	1,533.88	5.66	5.23	61.93	-2,094.82	113.97	2,016.04	2,005.19	10.84	185.898		
1,700.00	1,679.54	1,603.15	1,617.58	6.05	5.53	62.17	-2,097.39	125.30	2,006.47	1,994.95	11.53	174.093		
1,800.00	1,776.13	1,701.06	1,714.36	6.44	5.89	62.40	-2,100.78	139.70	1,997.35	1,985.09	12.26	162.937		
1,900.00	1,872.73	1,804.69	1,816.75	6.83	6.26	62.64	-2,104.16	155.33	1,988.05	1,975.04	13.02	152.735		
2,000.00	1,969.32	1,905.73	1,916.58	7.23	6.63	62.87	-2,107.35	170.58	1,978.69	1,964.92	13.77	143.716		
2,100.00	2,065.91	2,006.30	2,016.00	7.63	7.00	63.11	-2,110.42	185.47	1,969.26	1,954.74	14.52	135.614		
2,200.00	2,162.50	2,104.71	2,113.25	8.03	7.36	63.35	-2,113.41	200.18	1,959.85	1,944.58	15.27	128.356		
2,300.00	2,259.10	2,223.75	2,230.98	8.43	7.79	63.65	-2,116.61	217.50	1,950.17	1,934.08	16.09	121.193		
2,400.00	2,355.69	2,334.36	2,340.80	8.83	8.19	64.03	-2,118.39	230.55	1,939.56	1,922.67	16.88	114.878		
2,500.00	2,452.28	2,446.71	2,452.71	9.23	8.60	64.52	-2,119.25	240.43	1,928.33	1,910.65	17.68	109.069		
2,600.00	2,548.88	2,541.09	2,546.91	9.64	8.94	65.02	-2,119.46	245.96	1,916.87	1,898.45	18.42	104.090		
2,700.00	2,645.47	2,621.62	2,627.40	10.04	9.23	65.51	-2,120.16	248.60	1,906.36	1,887.25	19.10	99.785		
2,800.00	2,742.06	2,731.51	2,737.28	10.44	9.62	66.25	-2,120.89	250.24	1,896.03	1,876.13	19.89	95.321		
2,900.00	2,838.66	2,833.61	2,839.37	10.85	9.98	66.96	-2,121.11	251.39	1,885.57	1,864.92	20.65	91.297		
3,000.00	2,935.25	2,933.53	2,939.29	11.26	10.33	67.66	-2,121.03	252.31	1,875.10	1,853.69	21.41	87.580		
3,100.00	3,031.84	3,028.32	3,034.07	11.66	10.67	68.35	-2,120.92	252.76	1,864.95	1,842.80	22.15	84.188		
3,200.00	3,128.44	3,122.58	3,128.33	12.07	11.00	69.04	-2,120.88	252.97	1,855.19	1,832.30	22.89	81.042		
3,300.00	3,225.03	3,215.30	3,221.05	12.47	11.32	69.74	-2,120.99	253.02	1,845.91	1,822.29	23.62	78.145		
3,400.00	3,321.62	3,308.40	3,314.16	12.88	11.64	70.45	-2,121.27	252.86	1,837.16	1,812.81	24.35	75.459		
3,500.00	3,418.22	3,406.30	3,412.05	13.29	11.96	71.21	-2,121.63	252.50	1,828.83	1,803.75	25.08	72.910		
3,600.00	3,514.81	3,507.96	3,513.71	13.70	12.31	72.01	-2,121.74	252.02	1,820.60	1,794.76	25.84	70.464		
3,700.00	3,611.40	3,606.63	3,612.38	14.10	12.65	72.77	-2,121.77	252.29	1,812.50	1,785.91	26.59	68.155		
3,800.00	3,708.00	3,708.32	3,714.06	14.51	13.01	73.56	-2,121.71	252.72	1,804.62	1,777.25	27.37	65.945		
3,900.00	3,804.59	3,810.65	3,816.40	14.92	13.38	74.36	-2,121.28	253.24	1,796.70	1,768.56	28.14	63.853		
4,000.00	3,901.18	3,911.54	3,917.28	15.33	13.73	75.15	-2,120.63	253.88	1,788.87	1,759.97	28.91	61.885		
4,100.00	3,997.78	4,009.71	4,015.44	15.74	14.08	75.94	-2,119.79	254.43	1,781.21	1,751.55	29.67	60.044		
4,200.00	4,094.37	4,105.53	4,111.26	16.15	14.41	76.71	-2,118.94	254.87	1,773.88	1,743.46	30.42	58.318		
4,300.00	4,190.96	4,207.27	4,212.99	16.55	14.77	77.53	-2,117.95	255.37	1,766.81	1,735.62	31.19	56.650		
4,400.00	4,287.56	4,305.93	4,311.65	16.96	15.11	78.34	-2,116.76	255.92	1,759.86	1,727.91	31.95	55.081		
4,500.00	4,384.15	4,405.78	4,411.48	17.37	15.46	79.16	-2,115.44	256.60	1,753.13	1,720.42	32.72	53.584		
4,600.00	4,480.74	4,500.61	4,506.31	17.78	15.80	79.95	-2,114.16	257.28	1,746.72	1,713.25	33.47	52.189		
4,700.00	4,577.34	4,599.78	4,605.46	18.19	16.15	80.77	-2,112.77	257.97	1,740.64	1,706.41	34.24	50.843		
4,800.00	4,673.93	4,695.12	4,700.79	18.60	16.48	81.57	-2,111.43	258.68	1,734.91	1,699.92	34.99	49.583		
4,900.00	4,770.52	4,793.53	4,799.19	19.01	16.83	82.40	-2,110.03	259.40	1,729.53	1,693.78	35.75	48.372		

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 203H
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 203H	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
Rule Assigned:													
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	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.00	4,867.12	4,896.19	4,901.83	19.42	17.19	83.27	-2,108.34	260.28	1,724.28	1,687.75	36.53	47.198	
5,100.00	4,963.71	4,988.68	4,994.30	19.83	17.52	84.05	-2,106.72	261.35	1,719.22	1,681.94	37.28	46.116	
5,200.00	5,060.30	5,065.99	5,071.60	20.24	17.79	84.69	-2,106.34	262.29	1,715.55	1,677.57	37.98	45.173	
5,300.00	5,156.90	5,162.21	5,167.82	20.65	18.13	85.48	-2,106.53	263.60	1,712.85	1,674.11	38.74	44.218	
5,400.00	5,253.49	5,255.99	5,261.58	21.06	18.47	86.25	-2,106.46	265.19	1,710.12	1,670.64	39.49	43.307	
5,500.00	5,350.08	5,331.25	5,336.83	21.47	18.73	86.87	-2,106.77	265.99	1,708.49	1,668.33	40.16	42.537	
5,600.00	5,446.68	5,432.00	5,437.58	21.88	19.08	87.73	-2,107.86	266.12	1,708.16	1,667.23	40.93	41.735	
5,612.36	5,458.62	5,446.02	5,451.59	21.93	19.13	87.84	-2,107.97	266.18	1,708.10	1,667.07	41.03	41.631	
5,700.00	5,543.60	5,536.92	5,542.49	22.28	19.45	88.56	-2,108.48	266.70	1,707.62	1,665.91	41.71	40.942	
5,800.00	5,641.32	5,634.99	5,640.56	22.68	19.79	89.22	-2,108.83	267.36	1,707.20	1,664.75	42.45	40.214	
5,830.90	5,671.66	5,662.77	5,668.34	22.80	19.89	89.39	-2,108.92	267.47	1,707.15	1,664.49	42.67	40.012	
5,900.00	5,739.72	5,721.52	5,727.09	23.06	20.09	89.75	-2,109.06	267.16	1,707.39	1,664.26	43.13	39.586	
6,000.00	5,838.69	5,821.78	5,827.34	23.43	20.42	90.27	-2,109.22	265.93	1,708.14	1,664.31	43.84	38.965	
6,100.00	5,938.09	5,925.21	5,930.77	23.79	20.77	90.68	-2,109.43	265.12	1,708.80	1,664.25	44.54	38.362	
6,200.00	6,037.81	6,035.98	6,041.54	24.13	21.15	90.97	-2,109.46	264.98	1,709.00	1,663.72	45.28	37.745	
6,300.00	6,137.73	6,146.43	6,151.99	24.46	21.55	91.10	-2,109.10	265.44	1,708.58	1,662.58	46.00	37.139	
6,362.28	6,200.00	6,217.69	6,223.24	24.66	21.80	-149.55	-2,108.62	266.17	1,707.91	1,661.45	46.45	36.765	
6,400.00	6,237.72	7,595.37	7,025.48	24.78	26.48	-178.80	-2,139.18	1,100.16	1,697.03	1,651.82	45.21	37.540	
6,500.00	6,337.72	7,599.22	7,025.62	25.08	26.50	-178.95	-2,139.19	1,104.00	1,652.98	1,606.45	46.53	35.528	
6,600.00	6,437.72	7,603.06	7,025.76	25.38	26.51	-179.09	-2,139.20	1,107.84	1,613.92	1,566.12	47.81	33.759	
6,700.00	6,537.72	7,606.89	7,025.89	25.69	26.53	-179.24	-2,139.20	1,111.67	1,580.23	1,531.21	49.02	32.235	
6,731.88	6,569.60	7,608.11	7,025.94	25.79	26.53	-179.29	-2,139.20	1,112.88	1,570.67	1,521.28	49.39	31.801	
6,750.00	6,587.72	7,608.44	7,025.95	25.84	26.54	-90.77	-2,139.21	1,113.21	1,565.51	1,515.91	49.59	31.567	
6,775.00	6,612.66	7,607.70	7,025.92	25.91	26.53	-91.59	-2,139.20	1,112.48	1,558.71	1,508.86	49.86	31.264	
6,800.00	6,637.49	7,605.58	7,025.85	25.98	26.52	-92.30	-2,139.20	1,110.36	1,552.32	1,502.22	50.11	30.981	
6,825.00	6,662.13	7,602.09	7,025.72	26.05	26.51	-92.91	-2,139.20	1,106.88	1,546.36	1,496.02	50.34	30.720	
6,850.00	6,686.52	7,597.25	7,025.54	26.11	26.49	-93.41	-2,139.19	1,102.03	1,540.83	1,490.28	50.55	30.480	
6,875.00	6,710.59	7,591.05	7,025.32	26.17	26.47	-93.80	-2,139.18	1,095.84	1,535.75	1,485.00	50.75	30.261	
6,900.00	6,734.27	7,583.53	7,025.05	26.23	26.44	-94.09	-2,139.16	1,088.32	1,531.11	1,480.18	50.93	30.063	
6,925.00	6,757.50	7,574.70	7,024.72	26.29	26.40	-94.28	-2,139.14	1,079.50	1,526.92	1,475.83	51.09	29.886	
6,950.00	6,780.21	7,564.60	7,024.35	26.34	26.36	-94.39	-2,139.11	1,069.40	1,523.17	1,471.93	51.24	29.729	
6,975.00	6,802.35	7,553.24	7,023.93	26.39	26.31	-94.40	-2,139.08	1,058.05	1,519.85	1,468.49	51.36	29.592	
7,000.00	6,823.85	7,540.79	7,023.47	26.44	26.27	-94.33	-2,139.03	1,045.62	1,516.94	1,465.47	51.47	29.473	
7,025.00	6,844.65	7,527.59	7,022.99	26.49	26.22	-94.21	-2,138.99	1,032.42	1,514.43	1,462.87	51.56	29.369	
7,050.00	6,864.70	7,513.26	7,022.47	26.53	26.17	-94.02	-2,138.93	1,018.10	1,512.30	1,460.66	51.64	29.283	
7,075.00	6,883.94	7,497.84	7,021.91	26.58	26.11	-93.77	-2,138.88	1,002.70	1,510.53	1,458.83	51.71	29.213	
7,100.00	6,902.32	7,481.39	7,021.32	26.62	26.05	-93.47	-2,138.81	986.25	1,509.09	1,457.34	51.76	29.157	
7,125.00	6,919.79	7,463.94	7,020.71	26.65	25.99	-93.12	-2,138.74	968.82	1,507.96	1,456.17	51.79	29.116	
7,150.00	6,936.29	7,445.48	7,020.06	26.69	25.92	-92.74	-2,138.66	950.36	1,507.10	1,455.28	51.81	29.086	
7,175.00	6,951.79	7,425.83	7,019.37	26.72	25.86	-92.33	-2,138.57	930.73	1,506.48	1,454.64	51.83	29.065	
7,200.00	6,966.25	7,405.36	7,018.64	26.75	25.79	-91.91	-2,138.47	910.27	1,506.06	1,454.23	51.84	29.054	
7,225.00	6,979.61	7,384.12	7,017.86	26.78	25.72	-91.48	-2,138.35	889.05	1,505.83	1,454.00	51.83	29.051 SF	
7,245.89	6,989.92	7,372.94	7,017.35	26.81	25.68	-91.26	-2,138.25	877.88	1,505.72	1,453.89	51.83	29.052	
7,250.00	6,991.86	7,367.07	7,017.18	26.81	25.66	-91.15	-2,138.23	872.01	1,505.73	1,453.91	51.82	29.054	
7,275.00	7,002.94	7,331.19	7,015.71	26.84	25.56	-90.49	-2,137.97	836.16	1,505.74	1,453.95	51.79	29.072	
7,300.00	7,012.84	7,295.11	7,013.48	26.86	25.45	-89.88	-2,137.38	800.16	1,505.64	1,453.89	51.75	29.092	
7,325.00	7,021.52	7,258.89	7,010.47	26.88	25.35	-89.33	-2,136.46	764.07	1,505.42	1,453.71	51.71	29.114	
7,350.00	7,028.97	7,229.63	7,006.85	26.90	25.26	-88.90	-2,135.52	735.06	1,505.10	1,453.44	51.67	29.131	
7,375.00	7,035.15	7,201.28	7,001.66	26.92	25.18	-88.49	-2,134.47	707.21	1,504.74	1,453.12	51.62	29.149	
7,400.00	7,040.06	7,173.76	6,995.06	26.94	25.10	-88.09	-2,133.34	680.52	1,504.34	1,452.77	51.57	29.168	
7,425.00	7,043.68	7,150.92	6,988.45	26.95	25.03	-87.77	-2,132.32	658.68	1,503.92	1,452.39	51.53	29.187	
7,450.00	7,046.00	7,130.62	6,981.77	26.96	24.96	-87.49	-2,131.43	639.53	1,503.55	1,452.07	51.48	29.207	

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 203H
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 203H	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		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)			
7,475.00	7,047.01	7,110.53	6,974.45	26.97	24.90	-87.22	-2,130.55	620.85	1,503.24	1,451.81	51.43	29.230	
7,489.85	7,047.00	7,098.70	6,969.81	26.98	24.86	-87.07	-2,130.04	609.98	1,503.07	1,451.68	51.40	29.245	
7,500.00	7,046.83	7,090.68	6,966.52	26.98	24.84	-86.94	-2,129.70	602.67	1,502.98	1,451.60	51.38	29.255	
7,549.42	7,046.00	7,050.25	6,948.29	27.01	24.71	-86.27	-2,127.99	566.64	1,502.78	1,451.49	51.28	29.305 CC, ES	
7,600.00	7,045.16	7,008.40	6,926.57	27.05	24.57	-85.46	-2,126.11	530.93	1,503.01	1,451.83	51.17	29.371	
7,700.00	7,043.49	6,919.82	6,871.97	27.15	24.28	-83.42	-2,121.37	461.45	1,505.03	1,454.09	50.95	29.542	
7,800.00	7,041.82	6,857.19	6,827.47	27.31	24.07	-81.75	-2,116.89	417.65	1,509.50	1,458.69	50.81	29.709	
7,900.00	7,040.15	6,819.66	6,798.57	27.51	23.94	-80.67	-2,114.35	393.85	1,518.53	1,467.73	50.80	29.890	
8,000.00	7,038.48	6,784.99	6,770.48	27.76	23.82	-79.62	-2,112.26	373.64	1,532.64	1,481.80	50.84	30.144	
8,100.00	7,036.81	6,784.99	6,770.48	28.06	23.82	-79.62	-2,112.26	373.64	1,552.38	1,501.29	51.09	30.386	
8,200.00	7,035.14	6,738.33	6,730.73	28.40	23.66	-78.15	-2,109.88	349.36	1,576.60	1,525.48	51.11	30.845	
8,300.00	7,033.48	6,689.99	6,687.44	28.79	23.49	-76.55	-2,108.03	327.96	1,607.05	1,555.92	51.13	31.429	
8,400.00	7,031.81	6,689.99	6,687.44	29.22	23.49	-76.55	-2,108.03	327.96	1,641.36	1,589.92	51.44	31.909	
8,500.00	7,030.14	6,689.99	6,687.44	29.70	23.49	-76.55	-2,108.03	327.96	1,680.93	1,629.19	51.74	32.487	
8,600.00	7,028.47	6,689.99	6,687.44	30.21	23.49	-76.55	-2,108.03	327.96	1,725.40	1,673.36	52.03	33.159	
8,700.00	7,026.80	6,654.69	6,654.78	30.75	23.36	-75.37	-2,107.03	314.62	1,773.44	1,721.30	52.14	34.012	
8,800.00	7,025.13	6,641.66	6,642.56	31.33	23.32	-74.93	-2,106.73	310.12	1,825.73	1,773.38	52.35	34.874	
8,900.00	7,023.46	6,629.83	6,631.39	31.94	23.27	-74.53	-2,106.49	306.24	1,881.65	1,829.10	52.56	35.802	
9,000.00	7,021.79	6,594.99	6,598.11	32.58	23.15	-73.34	-2,105.94	295.93	1,941.39	1,888.75	52.64	36.881	
9,100.00	7,020.12	6,594.99	6,598.11	33.25	23.15	-73.34	-2,105.94	295.93	2,003.43	1,950.56	52.87	37.891	
9,200.00	7,018.45	6,594.99	6,598.11	33.94	23.15	-73.34	-2,105.94	295.93	2,068.45	2,015.36	53.09	38.963	
9,300.00	7,016.78	6,594.99	6,598.11	34.66	23.15	-73.34	-2,105.94	295.93	2,136.18	2,082.89	53.28	40.091	
9,400.00	7,015.11	6,594.99	6,598.11	35.39	23.15	-73.34	-2,105.94	295.93	2,206.36	2,152.90	53.46	41.271	
9,500.00	7,013.45	6,594.99	6,598.11	36.15	23.15	-73.34	-2,105.94	295.93	2,278.76	2,225.14	53.62	42.498	
9,600.00	7,011.78	6,594.99	6,598.11	36.93	23.15	-73.34	-2,105.94	295.93	2,353.19	2,299.43	53.77	43.768	
9,700.00	7,010.11	6,594.99	6,598.11	37.72	23.15	-73.34	-2,105.94	295.93	2,429.46	2,375.56	53.90	45.076	

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 203H
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 203H	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	9.01	2,043.10	324.10	2,068.65					
100.00	100.00	98.05	97.75	0.25	0.13	9.02	2,043.13	324.18	2,068.69	2,068.31	0.38	5,461.376		
200.00	200.00	195.08	194.78	0.61	0.31	9.02	2,043.25	324.53	2,068.87	2,067.95	0.92	2,256.212		
300.00	300.00	293.69	293.39	0.97	0.66	9.04	2,043.45	325.11	2,069.16	2,067.53	1.63	1,270.261		
400.00	400.00	376.14	375.83	1.33	0.96	9.05	2,043.86	325.57	2,069.77	2,067.49	2.28	907.090 ES		
500.00	500.00	455.30	454.98	1.68	1.23	9.05	2,044.97	325.56	2,071.21	2,068.29	2.92	709.657		
600.00	600.00	560.01	559.67	2.04	1.60	9.02	2,047.31	324.87	2,073.32	2,069.67	3.64	568.995		
700.00	699.98	656.45	656.08	2.39	1.94	-110.36	2,049.36	324.25	2,075.92	2,071.59	4.33	479.281		
800.00	799.84	752.16	751.76	2.73	2.28	-110.43	2,051.59	323.83	2,079.98	2,074.97	5.01	415.131		
900.00	899.45	851.61	851.18	3.08	2.64	-110.57	2,053.96	323.53	2,085.36	2,079.65	5.71	365.175		
1,000.00	998.70	920.30	919.86	3.42	2.88	-110.66	2,055.59	323.39	2,092.24	2,085.94	6.31	331.825		
1,100.00	1,097.47	1,013.55	1,013.05	3.78	3.22	-110.87	2,058.61	323.07	2,101.10	2,094.11	6.99	300.466		
1,200.00	1,195.62	1,106.30	1,105.69	4.14	3.55	-111.15	2,063.25	322.44	2,112.92	2,105.23	7.68	275.010		
1,300.00	1,293.06	1,166.29	1,165.57	4.51	3.76	-111.27	2,066.86	321.90	2,126.90	2,118.64	8.26	257.564		
1,349.92	1,341.38	1,209.98	1,209.16	4.70	3.92	-111.42	2,069.59	321.45	2,134.68	2,126.08	8.60	248.307		
1,400.00	1,389.76	1,253.63	1,252.72	4.89	4.07	-111.72	2,072.40	320.96	2,142.81	2,133.87	8.94	239.780		
1,500.00	1,486.35	1,341.39	1,340.28	5.27	4.39	-112.34	2,078.33	319.82	2,159.54	2,149.92	9.62	224.509		
1,600.00	1,582.95	1,429.64	1,428.29	5.66	4.70	-112.96	2,084.59	318.39	2,176.88	2,166.57	10.31	211.238		
1,700.00	1,679.54	1,522.60	1,520.98	6.05	5.04	-113.61	2,091.48	316.55	2,194.78	2,183.77	11.01	199.318		
1,800.00	1,776.13	1,624.43	1,622.51	6.44	5.40	-114.32	2,098.86	314.08	2,212.82	2,201.06	11.75	188.276		
1,900.00	1,872.73	1,726.96	1,724.75	6.83	5.77	-115.04	2,105.98	311.18	2,230.86	2,218.36	12.50	178.487		
2,000.00	1,969.32	1,830.51	1,828.04	7.23	6.14	-115.74	2,112.78	308.40	2,248.84	2,235.59	13.25	169.734		
2,100.00	2,065.91	1,938.23	1,935.52	7.63	6.53	-116.46	2,119.37	305.71	2,266.70	2,252.68	14.02	161.715		
2,200.00	2,162.50	2,048.18	2,045.27	8.03	6.92	-117.18	2,125.40	302.98	2,284.24	2,269.45	14.79	154.411		
2,300.00	2,259.10	2,181.40	2,178.33	8.43	7.40	-118.04	2,131.21	299.90	2,300.99	2,285.33	15.66	146.943		
2,400.00	2,355.69	2,314.57	2,311.42	8.83	7.87	-118.86	2,134.78	297.29	2,316.38	2,299.86	16.52	140.218		
2,500.00	2,452.28	2,446.11	2,442.94	9.23	8.33	-119.65	2,136.26	295.09	2,330.54	2,313.17	17.37	134.172		
2,600.00	2,548.88	2,540.54	2,537.35	9.64	8.66	-120.21	2,136.70	293.52	2,344.31	2,326.23	18.08	129.664		
2,700.00	2,645.47	2,639.77	2,636.57	10.04	9.01	-120.80	2,137.11	291.71	2,358.26	2,339.46	18.81	125.395		
2,800.00	2,742.06	2,753.06	2,749.84	10.44	9.40	-121.46	2,137.05	289.83	2,372.01	2,352.43	19.58	121.150		
2,900.00	2,838.66	2,866.20	2,862.97	10.85	9.78	-122.10	2,136.20	288.37	2,385.29	2,364.95	20.35	117.235		
3,000.00	2,935.25	2,979.12	2,975.87	11.26	10.16	-122.72	2,134.61	287.50	2,398.13	2,377.02	21.11	113.619		
3,100.00	3,031.84	3,075.43	3,072.16	11.66	10.48	-123.24	2,132.87	287.08	2,410.77	2,388.97	21.81	110.538		
3,200.00	3,128.44	3,166.55	3,163.27	12.07	10.79	-123.72	2,131.40	286.55	2,423.82	2,401.32	22.49	107.758		
3,300.00	3,225.03	3,259.68	3,256.39	12.47	11.10	-124.21	2,130.08	285.93	2,437.25	2,414.07	23.19	105.122		
3,400.00	3,321.62	3,353.77	3,350.48	12.88	11.42	-124.70	2,128.87	285.45	2,450.99	2,427.11	23.88	102.635		
3,500.00	3,418.22	3,440.74	3,437.44	13.29	11.72	-125.15	2,127.96	285.06	2,465.16	2,440.61	24.55	100.408		
3,600.00	3,514.81	3,528.68	3,525.38	13.70	12.02	-125.60	2,127.38	284.60	2,479.88	2,454.65	25.23	98.301		
3,700.00	3,611.40	3,615.76	3,612.46	14.10	12.32	-126.03	2,127.10	284.07	2,495.13	2,469.22	25.90	96.325 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 203H
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 203H	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	0.55	210.00	2.00	210.05					
100.00	100.00	94.70	98.70	0.25	0.12	0.51	210.22	1.88	210.23	209.85	0.37	560.841		
200.00	200.00	194.86	198.85	0.61	0.45	0.42	210.80	1.53	210.81	209.75	1.06	198.556		
300.00	300.00	295.74	299.73	0.97	0.81	0.24	211.08	0.88	211.08	209.31	1.78	118.810		
400.00	400.00	397.46	401.45	1.33	1.16	0.12	210.77	0.43	210.77	208.29	2.49	84.753		
500.00	500.00	498.37	502.35	1.68	1.51	0.00	209.66	0.01	209.67	206.47	3.19	65.626		
600.00	600.00	597.80	601.78	2.04	1.86	-0.21	208.62	-0.76	208.63	204.73	3.90	53.459		
638.29	638.29	635.70	639.67	2.18	1.99	-119.70	208.33	-1.04	208.47	204.30	4.17	50.000 CC		
700.00	699.98	697.12	701.09	2.39	2.21	-120.17	207.97	-1.47	208.85	204.25	4.60	45.388 ES		
800.00	799.84	797.52	801.48	2.73	2.57	-121.55	207.37	-2.15	210.96	205.66	5.30	39.818		
900.00	899.45	899.46	903.42	3.08	2.93	-123.69	206.08	-2.74	214.44	208.44	6.00	35.717		
1,000.00	998.70	1,000.80	1,004.73	3.42	3.29	-126.35	203.70	-2.74	219.12	212.41	6.71	32.659		
1,100.00	1,097.47	1,098.05	1,101.94	3.78	3.63	-129.32	201.31	-2.32	226.30	218.90	7.41	30.560		
1,200.00	1,195.62	1,191.99	1,195.88	4.14	3.96	-132.37	200.44	-1.50	237.83	229.74	8.09	29.414		
1,300.00	1,293.06	1,283.93	1,287.80	4.51	4.27	-135.33	201.65	-0.45	254.60	245.85	8.75	29.092		
1,349.92	1,341.38	1,329.65	1,333.49	4.70	4.42	-136.75	203.06	0.14	265.00	255.92	9.08	29.174		
1,400.00	1,389.76	1,375.47	1,379.27	4.89	4.58	-138.22	204.96	0.85	276.39	266.98	9.41	29.364		
1,500.00	1,486.35	1,469.66	1,473.31	5.27	4.90	-140.73	209.95	2.77	300.49	290.41	10.08	29.811		
1,600.00	1,582.95	1,565.84	1,569.27	5.66	5.23	-142.71	215.75	5.66	325.34	314.58	10.76	30.239		
1,700.00	1,679.54	1,661.46	1,664.59	6.05	5.56	-144.21	222.07	9.59	350.53	339.10	11.44	30.648		
1,800.00	1,776.13	1,756.54	1,759.30	6.44	5.89	-145.33	229.09	14.32	376.21	364.09	12.12	31.051		
1,900.00	1,872.73	1,850.47	1,852.74	6.83	6.22	-146.13	236.94	19.81	402.44	389.65	12.79	31.467		
2,000.00	1,969.32	1,942.56	1,944.17	7.23	6.54	-146.62	245.94	26.10	429.50	416.04	13.45	31.924		
2,100.00	2,065.91	2,035.86	2,036.58	7.63	6.87	-146.86	256.49	33.43	457.40	443.28	14.13	32.377		
2,200.00	2,162.50	2,131.31	2,130.93	8.03	7.21	-146.92	268.18	41.85	485.66	470.84	14.82	32.776		
2,300.00	2,259.10	2,229.13	2,227.58	8.43	7.56	-146.92	280.26	50.96	513.78	498.25	15.52	33.094		
2,400.00	2,355.69	2,327.35	2,324.66	8.83	7.91	-146.94	291.96	60.19	541.49	525.25	16.24	33.349		
2,500.00	2,452.28	2,425.18	2,421.39	9.23	8.26	-146.97	303.27	69.47	568.86	551.91	16.95	33.564		
2,600.00	2,548.88	2,519.43	2,514.59	9.64	8.59	-147.00	314.12	78.34	596.23	578.59	17.64	33.804		
2,700.00	2,645.47	2,614.12	2,608.20	10.04	8.93	-147.02	325.32	87.17	623.90	605.57	18.33	34.034		
2,800.00	2,742.06	2,707.51	2,700.51	10.44	9.27	-147.03	336.62	95.75	651.86	632.85	19.02	34.277		
2,900.00	2,838.66	2,802.99	2,794.87	10.85	9.61	-147.05	348.37	104.37	680.08	660.36	19.72	34.490		
3,000.00	2,935.25	2,899.36	2,890.11	11.26	9.96	-147.07	360.23	113.10	708.29	687.86	20.43	34.676		
3,100.00	3,031.84	2,998.22	2,987.81	11.66	10.32	-147.08	372.25	122.23	736.28	715.13	21.15	34.810		
3,200.00	3,128.44	3,097.85	3,086.32	12.07	10.68	-147.10	383.90	131.51	763.84	741.96	21.88	34.907		
3,300.00	3,225.03	3,195.53	3,182.97	12.47	11.03	-147.15	394.89	140.46	791.10	768.50	22.60	35.004		
3,400.00	3,321.62	3,294.21	3,280.64	12.88	11.39	-147.20	405.70	149.44	818.15	794.82	23.33	35.075		
3,500.00	3,418.22	3,396.93	3,382.40	13.29	11.76	-147.28	416.27	158.71	844.67	820.59	24.08	35.083		
3,600.00	3,514.81	3,478.44	3,463.16	13.70	12.06	-147.37	424.74	165.59	871.55	846.86	24.69	35.301		
3,700.00	3,611.40	3,564.89	3,548.73	14.10	12.37	-147.45	435.05	172.39	899.98	874.65	25.33	35.528		
3,800.00	3,708.00	3,657.11	3,640.00	14.51	12.71	-147.54	446.42	179.05	929.06	903.04	26.01	35.716		
3,900.00	3,804.59	3,759.98	3,741.86	14.92	13.08	-147.66	458.88	186.30	958.04	931.28	26.77	35.790		
4,000.00	3,901.18	3,857.82	3,838.74	15.33	13.44	-147.74	470.29	193.86	986.33	958.84	27.49	35.880		
4,100.00	3,997.78	3,953.10	3,933.08	15.74	13.78	-147.82	481.39	201.16	1,014.64	986.45	28.19	35.988		
4,200.00	4,094.37	4,046.78	4,025.86	16.15	14.12	-147.90	492.36	208.18	1,043.08	1,014.19	28.89	36.109		
4,300.00	4,190.96	4,140.13	4,118.31	16.55	14.46	-147.99	503.39	214.91	1,071.74	1,042.17	29.58	36.235		
4,400.00	4,287.56	4,234.30	4,211.57	16.96	14.81	-148.07	514.63	221.52	1,100.60	1,070.32	30.27	36.354		
4,500.00	4,384.15	4,325.81	4,302.20	17.37	15.14	-148.16	525.67	227.76	1,129.67	1,098.72	30.95	36.498		
4,600.00	4,480.74	4,418.26	4,393.74	17.78	15.48	-148.25	537.08	233.82	1,159.09	1,127.46	31.64	36.638		
4,700.00	4,577.34	4,510.72	4,485.27	18.19	15.81	-148.33	548.71	239.80	1,188.75	1,156.43	32.32	36.780		
4,800.00	4,673.93	4,603.08	4,576.68	18.60	16.15	-148.40	560.54	245.67	1,218.66	1,185.65	33.00	36.924		
4,900.00	4,770.52	4,695.10	4,667.76	19.01	16.48	-148.48	572.45	251.26	1,248.81	1,215.13	33.69	37.072		

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 203H
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 203H	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	4,867.12	4,789.62	4,761.34	19.42	16.83	-148.58	584.64	256.56	1,279.16	1,244.78	34.38	37.202		
5,100.00	4,963.71	4,884.60	4,855.42	19.83	17.17	-148.70	596.67	261.51	1,309.51	1,274.43	35.09	37.323		
5,200.00	5,060.30	4,979.18	4,949.15	20.24	17.52	-148.82	608.46	266.03	1,339.91	1,304.12	35.78	37.444		
5,300.00	5,156.90	5,122.41	5,091.57	20.65	18.03	-149.15	622.56	271.19	1,368.78	1,331.97	36.81	37.188		
5,400.00	5,253.49	5,219.32	5,188.22	21.06	18.38	-149.47	629.31	273.49	1,395.85	1,358.34	37.51	37.212		
5,500.00	5,350.08	5,332.65	5,301.28	21.47	18.78	-149.85	636.64	275.97	1,422.71	1,384.40	38.31	37.132		
5,600.00	5,446.68	5,449.51	5,418.03	21.88	19.20	-150.31	641.09	277.92	1,447.58	1,408.45	39.13	36.994		
5,612.36	5,458.62	5,461.75	5,430.26	21.93	19.24	-150.36	641.49	278.11	1,450.62	1,411.40	39.22	36.988		
5,700.00	5,543.60	5,553.70	5,522.16	22.28	19.57	-150.90	644.26	279.52	1,470.88	1,431.02	39.87	36.893		
5,800.00	5,641.32	5,657.19	5,625.61	22.68	19.93	-151.41	646.72	281.01	1,490.78	1,450.18	40.60	36.720		
5,900.00	5,739.72	5,766.10	5,734.49	23.06	20.31	-151.84	648.60	282.52	1,507.18	1,465.83	41.35	36.445		
6,000.00	5,838.69	5,867.37	5,835.75	23.43	20.67	-152.15	649.80	283.95	1,520.10	1,478.04	42.07	36.136		
6,100.00	5,938.09	5,960.60	5,928.96	23.79	21.00	-152.36	650.96	285.04	1,530.14	1,487.41	42.73	35.808		
6,200.00	6,037.81	6,054.85	6,023.20	24.13	21.33	-152.51	652.18	285.56	1,537.49	1,494.09	43.40	35.427		
6,300.00	6,137.73	6,151.21	6,119.56	24.46	21.67	-152.59	653.45	285.65	1,542.01	1,497.94	44.07	34.988		
6,362.28	6,200.00	6,209.39	6,177.73	24.66	21.87	-132.25	654.18	285.38	1,543.43	1,498.96	44.47	34.704		
6,400.00	6,237.72	6,245.42	6,213.76	24.78	21.99	-33.26	654.59	285.01	1,544.00	1,499.29	44.72	34.529		
6,500.00	6,337.72	6,345.80	6,314.12	25.08	22.34	-33.28	655.49	283.51	1,545.57	1,500.19	45.38	34.056		
6,600.00	6,437.72	6,450.81	6,419.12	25.38	22.69	-33.33	655.96	281.62	1,546.93	1,500.86	46.07	33.576		
6,700.00	6,537.72	6,557.75	6,526.04	25.69	23.05	-33.39	656.06	279.79	1,547.95	1,501.18	46.77	33.096		
6,731.88	6,569.60	6,592.84	6,561.12	25.79	23.17	-33.41	655.85	279.07	1,548.16	1,501.16	47.00	32.941		
6,750.00	6,587.72	6,612.78	6,581.06	25.84	23.24	55.76	655.67	278.61	1,548.06	1,500.93	47.13	32.849		
6,775.00	6,612.66	6,637.89	6,606.16	25.91	23.32	55.87	655.42	278.04	1,547.26	1,499.98	47.29	32.721		
6,800.00	6,637.49	6,663.20	6,631.46	25.98	23.41	56.09	655.18	277.48	1,545.73	1,498.28	47.45	32.578		
6,825.00	6,662.13	6,688.35	6,656.60	26.05	23.49	56.43	654.94	276.94	1,543.47	1,495.86	47.61	32.421		
6,850.00	6,686.52	6,714.36	6,682.60	26.11	23.58	56.88	654.69	276.40	1,540.48	1,492.71	47.77	32.249		
6,875.00	6,710.59	6,741.88	6,710.12	26.17	23.67	57.48	654.39	275.87	1,536.76	1,488.82	47.94	32.057		
6,900.00	6,734.27	6,768.96	6,737.20	26.23	23.76	58.19	654.05	275.39	1,532.31	1,484.21	48.10	31.854		
6,925.00	6,757.50	6,795.53	6,763.76	26.29	23.85	59.03	653.68	274.95	1,527.17	1,478.90	48.27	31.641		
6,950.00	6,780.21	6,820.48	6,788.70	26.34	23.93	59.97	653.26	274.52	1,521.36	1,472.94	48.42	31.421		
6,975.00	6,802.35	6,844.82	6,813.02	26.39	24.01	61.03	652.75	273.99	1,514.94	1,466.38	48.57	31.193		
7,000.00	6,823.85	6,868.59	6,836.78	26.44	24.09	62.19	652.15	273.37	1,507.94	1,459.23	48.71	30.957		
7,025.00	6,844.65	6,891.74	6,859.91	26.49	24.17	63.45	651.48	272.67	1,500.41	1,451.55	48.85	30.713		
7,050.00	6,864.70	6,911.81	6,879.96	26.53	24.23	64.77	650.88	272.07	1,492.39	1,443.41	48.98	30.470		
7,075.00	6,883.94	6,930.82	6,898.96	26.58	24.29	66.18	650.39	271.61	1,483.96	1,434.85	49.10	30.222		
7,100.00	6,902.32	6,948.86	6,917.00	26.62	24.35	67.67	649.98	271.27	1,475.16	1,425.94	49.22	29.971		
7,125.00	6,919.79	6,965.88	6,934.00	26.65	24.41	69.22	649.66	271.03	1,466.05	1,416.72	49.33	29.717		
7,150.00	6,936.29	6,981.81	6,949.94	26.69	24.46	70.83	649.41	270.89	1,456.68	1,407.24	49.44	29.462		
7,175.00	6,951.79	6,996.39	6,964.51	26.72	24.51	72.47	649.22	270.82	1,447.12	1,397.57	49.55	29.206		
7,200.00	6,966.25	7,009.79	6,977.91	26.75	24.56	74.13	649.07	270.78	1,437.41	1,387.76	49.65	28.951		
7,225.00	6,979.61	7,022.13	6,990.26	26.78	24.60	75.80	648.95	270.75	1,427.62	1,377.87	49.75	28.697		
7,250.00	6,991.86	7,033.39	7,001.51	26.81	24.64	77.46	648.86	270.75	1,417.79	1,367.95	49.84	28.445		
7,275.00	7,002.94	7,043.53	7,011.65	26.84	24.67	79.10	648.79	270.76	1,407.99	1,358.06	49.93	28.197		
7,300.00	7,012.84	7,052.54	7,020.66	26.86	24.70	80.71	648.75	270.78	1,398.27	1,348.25	50.02	27.952		
7,325.00	7,021.52	7,060.40	7,028.52	26.88	24.73	82.27	648.71	270.80	1,388.67	1,338.57	50.11	27.713		
7,350.00	7,028.97	7,067.08	7,035.21	26.90	24.75	83.76	648.69	270.83	1,379.26	1,329.07	50.19	27.480		
7,375.00	7,035.15	7,072.60	7,040.72	26.92	24.77	85.18	648.67	270.85	1,370.07	1,319.80	50.27	27.254		
7,400.00	7,040.06	7,080.99	7,049.11	26.94	24.80	86.69	648.65	270.90	1,361.17	1,310.81	50.36	27.027		
7,425.00	7,043.68	7,080.99	7,049.11	26.95	24.80	87.79	648.65	270.90	1,352.57	1,302.15	50.42	26.826		
7,450.00	7,046.00	7,082.22	7,050.34	26.96	24.80	88.89	648.65	270.91	1,344.33	1,293.85	50.48	26.629		
7,475.00	7,047.01	7,083.15	7,051.27	26.97	24.81	89.93	648.65	270.91	1,336.48	1,285.93	50.55	26.441		
7,489.85	7,047.00	7,083.03	7,051.16	26.98	24.81	90.48	648.65	270.91	1,332.02	1,281.43	50.58	26.335		

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 203H
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 203H	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		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance			Offset Well Error: 0.00 usft	
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	Warning
7,500.00	7,046.83	7,082.79	7,050.91	26.98	24.80	90.47	648.65	270.91	1,329.05	1,278.45	50.60	26.264	
7,600.00	7,045.16	7,080.99	7,049.11	27.05	24.80	90.39	648.65	270.90	1,303.72	1,252.85	50.87	25.627	
7,700.00	7,043.49	7,080.99	7,049.11	27.15	24.80	90.39	648.65	270.90	1,285.68	1,234.50	51.19	25.116	
7,800.00	7,041.82	7,080.99	7,049.11	27.31	24.80	90.39	648.65	270.90	1,275.26	1,223.72	51.54	24.744	
7,883.49	7,040.43	7,080.99	7,049.11	27.48	24.80	90.39	648.65	270.90	1,272.52	1,220.68	51.85	24.543	
7,900.00	7,040.15	7,080.99	7,049.11	27.51	24.80	90.39	648.65	270.90	1,272.63	1,220.72	51.91	24.518	
8,000.00	7,038.48	7,072.78	7,040.90	27.76	24.77	90.02	648.67	270.86	1,277.82	1,225.56	52.25	24.455 SF	
8,100.00	7,036.81	7,070.95	7,039.07	28.06	24.76	89.94	648.67	270.85	1,290.77	1,238.15	52.61	24.533	
8,200.00	7,035.14	7,069.16	7,037.28	28.40	24.76	89.86	648.68	270.84	1,311.23	1,258.27	52.96	24.760	
8,300.00	7,033.48	7,067.40	7,035.52	28.79	24.75	89.78	648.69	270.83	1,338.87	1,285.60	53.27	25.133	
8,400.00	7,031.81	7,065.67	7,033.79	29.22	24.75	89.70	648.69	270.82	1,373.25	1,319.70	53.55	25.643	
8,500.00	7,030.14	7,063.98	7,032.10	29.70	24.74	89.63	648.70	270.82	1,413.88	1,360.08	53.80	26.283	
8,600.00	7,028.47	7,062.31	7,030.44	30.21	24.74	89.55	648.70	270.81	1,460.23	1,406.23	54.00	27.041	
8,700.00	7,026.80	7,060.68	7,028.81	30.75	24.73	89.48	648.71	270.80	1,511.78	1,457.61	54.17	27.908	
8,800.00	7,025.13	7,059.08	7,027.20	31.33	24.72	89.40	648.72	270.80	1,568.03	1,513.72	54.31	28.873	
8,900.00	7,023.46	7,057.51	7,025.63	31.94	24.72	89.33	648.72	270.79	1,628.47	1,574.05	54.42	29.926	
9,000.00	7,021.79	7,055.96	7,024.09	32.58	24.71	89.26	648.73	270.79	1,692.66	1,638.16	54.50	31.058	
9,100.00	7,020.12	7,054.45	7,022.57	33.25	24.71	89.20	648.74	270.78	1,760.20	1,705.64	54.56	32.261	
9,200.00	7,018.45	7,052.96	7,021.08	33.94	24.70	89.13	648.74	270.78	1,830.71	1,776.10	54.61	33.525	
9,300.00	7,016.78	7,051.49	7,019.61	34.66	24.70	89.06	648.75	270.78	1,903.86	1,849.22	54.64	34.845	
9,400.00	7,015.11	7,050.05	7,018.18	35.39	24.69	89.00	648.76	270.77	1,979.36	1,924.70	54.66	36.214	
9,500.00	7,013.45	7,048.64	7,016.76	36.15	24.69	88.93	648.77	270.77	2,056.94	2,002.28	54.67	37.627	
9,600.00	7,011.78	7,047.25	7,015.37	36.93	24.68	88.87	648.77	270.77	2,136.39	2,081.72	54.67	39.078	
9,700.00	7,010.11	7,045.88	7,014.00	37.72	24.68	88.81	648.78	270.76	2,217.51	2,162.84	54.67	40.563	
9,800.00	7,008.44	7,044.54	7,012.66	38.54	24.68	88.75	648.79	270.76	2,300.11	2,245.45	54.66	42.079	
9,900.00	7,006.77	7,043.22	7,011.34	39.36	24.67	88.69	648.80	270.76	2,384.04	2,329.39	54.65	43.622	
10,000.00	7,005.10	7,041.92	7,010.04	40.20	24.67	88.63	648.80	270.76	2,469.17	2,414.53	54.64	45.188	

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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	0.57	120.00	1.20	120.01					
100.00	100.00	99.94	99.94	0.25	0.13	0.60	120.02	1.25	120.02	119.65	0.38	317.994		
200.00	200.00	199.82	199.82	0.61	0.46	0.88	120.44	1.84	120.45	119.38	1.07	112.414		
300.00	300.00	299.32	299.31	0.97	0.81	1.03	120.90	2.18	120.92	119.14	1.78	67.987		
400.00	400.00	398.93	398.92	1.33	1.16	0.94	121.82	2.00	121.84	119.35	2.49	48.969		
500.00	500.00	498.30	498.28	1.68	1.52	0.91	123.05	1.94	123.07	119.87	3.20	38.455		
600.00	600.00	598.18	598.15	2.04	1.87	1.14	124.50	2.49	124.54	120.62	3.92	31.803		
700.00	699.98	698.11	698.07	2.39	2.23	-118.87	125.96	2.50	126.84	122.22	4.62	27.459		
800.00	799.84	798.04	797.99	2.73	2.58	-121.11	127.55	1.81	131.05	125.74	5.31	24.661		
900.00	899.45	898.66	898.59	3.08	2.94	-124.56	128.47	0.83	136.77	130.75	6.01	22.744		
1,000.00	998.70	998.00	997.93	3.42	3.29	-128.79	128.80	-0.15	144.55	137.84	6.71	21.540		
1,100.00	1,097.47	1,096.34	1,096.26	3.78	3.63	-133.39	129.30	-1.12	155.62	148.21	7.41	21.003		
1,200.00	1,195.62	1,194.26	1,194.17	4.14	3.98	-138.13	129.80	-2.17	170.23	162.12	8.11	20.993		
1,300.00	1,293.06	1,291.48	1,291.39	4.51	4.32	-142.70	130.28	-3.30	188.64	179.84	8.81	21.424		
1,349.92	1,341.38	1,339.69	1,339.59	4.70	4.49	-144.86	130.47	-3.87	199.27	190.12	9.15	21.772		
1,400.00	1,389.76	1,387.60	1,387.50	4.89	4.66	-146.96	130.72	-4.42	210.61	201.11	9.50	22.179		
1,500.00	1,486.35	1,486.06	1,485.96	5.27	5.01	-150.61	131.15	-5.36	233.80	223.61	10.18	22.956		
1,600.00	1,582.95	1,588.51	1,588.39	5.66	5.36	-153.79	129.89	-5.61	256.00	245.12	10.88	23.531		
1,700.00	1,679.54	1,690.78	1,690.60	6.05	5.70	-156.50	126.60	-4.65	276.54	264.97	11.57	23.905		
1,800.00	1,776.13	1,790.93	1,790.64	6.44	6.04	-158.67	122.61	-2.40	296.15	283.90	12.25	24.171		
1,900.00	1,872.73	1,890.80	1,890.38	6.83	6.38	-160.53	118.15	0.47	315.35	302.42	12.94	24.372		
2,000.00	1,969.32	1,994.29	1,993.63	7.23	6.73	-162.37	112.10	3.67	333.69	320.05	13.64	24.464		
2,100.00	2,065.91	2,100.72	2,099.63	7.63	7.09	-164.31	103.18	7.39	350.26	335.91	14.35	24.409		
2,200.00	2,162.50	2,209.49	2,207.57	8.03	7.47	-166.43	90.66	11.83	364.60	349.54	15.06	24.208		
2,300.00	2,259.10	2,322.00	2,318.66	8.43	7.86	-168.71	73.93	18.02	376.05	360.28	15.77	23.841		
2,400.00	2,355.69	2,432.45	2,426.96	8.83	8.25	-171.00	53.97	26.33	384.31	367.84	16.48	23.323		
2,500.00	2,452.28	2,534.87	2,526.96	9.23	8.61	-173.14	33.70	35.21	391.09	373.91	17.18	22.758		
2,600.00	2,548.88	2,633.39	2,623.07	9.64	8.97	-175.16	13.81	43.82	398.10	380.20	17.90	22.244		
2,700.00	2,645.47	2,731.53	2,718.82	10.04	9.32	-177.12	-6.04	52.18	405.75	387.13	18.61	21.798		
2,800.00	2,742.06	2,828.47	2,813.41	10.44	9.67	-179.01	-25.68	60.22	414.04	394.71	19.33	21.416		
2,900.00	2,838.66	2,924.35	2,907.16	10.85	10.03	179.26	-44.34	67.68	423.62	403.57	20.05	21.125		
3,000.00	2,935.25	3,022.66	3,003.28	11.26	10.39	177.54	-63.54	75.15	433.75	412.97	20.78	20.873		
3,100.00	3,031.84	3,119.21	3,097.69	11.66	10.75	175.90	-82.47	82.15	444.52	423.01	21.51	20.668		
3,200.00	3,128.44	3,217.63	3,193.96	12.07	11.11	174.28	-101.80	88.94	455.95	433.71	22.24	20.500		
3,300.00	3,225.03	3,315.19	3,289.37	12.47	11.48	172.74	-121.04	95.60	467.78	444.80	22.98	20.359		
3,400.00	3,321.62	3,412.78	3,384.88	12.88	11.84	171.30	-140.07	101.99	480.26	456.54	23.71	20.251		
3,500.00	3,418.22	3,512.01	3,481.97	13.29	12.22	169.89	-159.47	108.54	492.97	468.51	24.46	20.153		
3,600.00	3,514.81	3,612.51	3,580.55	13.70	12.59	168.75	-177.54	116.04	505.67	480.45	25.21	20.057		
3,700.00	3,611.40	3,711.22	3,677.63	14.10	12.96	167.92	-193.33	124.34	518.26	492.31	25.95	19.971		
3,800.00	3,708.00	3,804.70	3,769.64	14.51	13.31	167.18	-208.11	131.69	531.54	504.87	26.67	19.930		
3,900.00	3,804.59	3,896.94	3,860.42	14.92	13.66	166.37	-223.34	137.58	546.11	518.72	27.39	19.942		
4,000.00	3,901.18	3,993.25	3,955.30	15.33	14.02	165.58	-238.91	143.10	561.52	533.40	28.12	19.970		
4,100.00	3,997.78	4,093.42	4,054.10	15.74	14.40	164.87	-254.49	148.70	577.33	548.46	28.87	19.997		
4,200.00	4,094.37	4,201.79	4,160.70	16.15	14.81	164.06	-272.49	156.17	591.68	562.01	29.67	19.945		
4,300.00	4,190.96	4,299.62	4,256.90	16.55	15.18	163.38	-288.70	163.39	605.68	575.27	30.41	19.916		
4,400.00	4,287.56	4,397.51	4,353.28	16.96	15.54	162.79	-304.24	170.58	619.96	588.80	31.16	19.899		
4,500.00	4,384.15	4,502.75	4,456.92	17.37	15.94	162.21	-320.72	178.60	634.09	602.15	31.93	19.856		
4,600.00	4,480.74	4,607.35	4,559.43	17.78	16.34	161.47	-339.46	187.53	646.90	614.18	32.72	19.772		
4,700.00	4,577.34	4,707.29	4,657.26	18.19	16.72	160.75	-357.88	196.31	659.45	625.97	33.48	19.695		
4,800.00	4,673.93	4,805.27	4,753.16	18.60	17.10	160.06	-376.03	204.93	672.09	637.85	34.24	19.628		
4,900.00	4,770.52	4,901.39	4,847.37	19.01	17.47	159.46	-393.24	213.22	685.09	650.10	34.99	19.579		
5,000.00	4,867.12	4,995.87	4,940.21	19.42	17.83	158.99	-408.91	221.09	698.67	662.95	35.73	19.557		

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 203H
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 203H	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							Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Reference 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	4,963.71	5,083.84	5,026.87	19.83	18.16	158.64	-422.49	227.68	713.31	676.89	36.42	19.586		
5,200.00	5,060.30	5,178.09	5,119.84	20.24	18.52	158.29	-436.75	233.54	729.26	692.11	37.15	19.632		
5,300.00	5,156.90	5,279.05	5,219.48	20.65	18.90	157.95	-451.86	239.79	745.29	707.38	37.91	19.659		
5,400.00	5,253.49	5,374.58	5,313.73	21.06	19.26	157.63	-466.21	245.78	761.26	722.62	38.64	19.700		
5,500.00	5,350.08	5,479.88	5,417.69	21.47	19.66	157.33	-481.52	252.50	777.21	737.78	39.43	19.710		
5,600.00	5,446.68	5,577.99	5,514.44	21.88	20.03	157.03	-496.36	259.16	792.71	752.52	40.18	19.727		
5,612.36	5,458.62	5,588.97	5,525.28	21.93	20.07	157.00	-497.98	259.90	794.64	754.37	40.27	19.734		
5,700.00	5,543.60	5,672.99	5,608.30	22.28	20.39	156.89	-509.64	265.41	807.34	766.43	40.91	19.735		
5,800.00	5,641.32	5,772.80	5,706.90	22.68	20.76	156.63	-523.72	271.85	818.95	777.29	41.66	19.656		
5,900.00	5,739.72	5,865.04	5,798.08	23.06	21.11	156.31	-536.56	277.45	827.81	785.44	42.37	19.537		
6,000.00	5,838.69	5,957.60	5,889.77	23.43	21.46	155.97	-548.13	282.41	834.39	791.31	43.07	19.371		
6,100.00	5,938.09	6,054.12	5,985.35	23.79	21.82	155.46	-560.77	286.97	838.42	794.62	43.80	19.142		
6,200.00	6,037.81	6,147.42	6,077.78	24.13	22.16	154.87	-572.83	290.82	839.97	795.47	44.50	18.874		
6,300.00	6,137.73	6,251.39	6,180.83	24.46	22.55	154.10	-585.96	295.11	838.51	793.23	45.28	18.518		
6,362.28	6,200.00	6,312.21	6,241.05	24.66	22.78	-87.10	-594.10	297.70	835.98	790.25	45.73	18.281		
6,400.00	6,237.72	6,348.55	6,277.01	24.78	22.92	-87.43	-599.06	299.20	834.16	788.17	45.99	18.136		
6,500.00	6,337.72	6,446.77	6,374.30	25.08	23.28	-88.32	-612.03	303.01	829.76	783.05	46.71	17.765		
6,600.00	6,437.72	6,552.05	6,478.46	25.38	23.68	-89.32	-626.56	307.84	824.83	777.35	47.48	17.374		
6,700.00	6,537.72	6,644.66	6,570.19	25.69	24.03	-90.16	-638.64	311.89	820.35	772.20	48.15	17.037		
6,731.88	6,569.60	6,673.77	6,599.06	25.79	24.13	-90.40	-642.17	313.00	819.15	770.79	48.36	16.938		
6,750.00	6,587.72	6,690.31	6,615.48	25.84	24.19	-1.37	-644.12	313.59	818.17	769.69	48.48	16.877		
6,775.00	6,612.66	6,713.58	6,638.58	25.91	24.28	-1.57	-646.80	314.37	815.76	767.12	48.64	16.770		
6,800.00	6,637.49	6,738.96	6,663.78	25.98	24.38	-1.80	-649.76	315.23	812.06	763.24	48.82	16.632		
6,825.00	6,662.13	6,764.07	6,688.68	26.05	24.47	-2.05	-652.81	316.10	807.06	758.06	49.00	16.470		
6,850.00	6,686.52	6,788.82	6,713.22	26.11	24.56	-2.33	-655.93	316.98	800.77	751.60	49.17	16.284		
6,875.00	6,710.59	6,813.10	6,737.28	26.17	24.65	-2.63	-659.09	317.87	793.22	743.88	49.34	16.075		
6,900.00	6,734.27	6,836.83	6,760.78	26.23	24.74	-2.96	-662.20	318.76	784.43	734.93	49.51	15.845		
6,925.00	6,757.50	6,860.03	6,783.77	26.29	24.83	-3.32	-665.24	319.65	774.43	724.76	49.67	15.592		
6,950.00	6,780.21	6,882.64	6,806.17	26.34	24.91	-3.70	-668.20	320.53	763.25	713.43	49.82	15.320		
6,975.00	6,802.35	6,905.45	6,828.76	26.39	25.00	-4.15	-671.19	321.44	750.91	700.93	49.98	15.026		
7,000.00	6,823.85	6,929.37	6,852.46	26.44	25.09	-4.67	-674.27	322.47	737.39	687.26	50.14	14.708		
7,025.00	6,844.65	6,952.32	6,875.20	26.49	25.17	-5.24	-677.14	323.56	722.74	672.45	50.29	14.372		
7,050.00	6,864.70	6,974.23	6,896.91	26.53	25.25	-5.89	-679.82	324.68	706.98	656.55	50.43	14.018		
7,075.00	6,883.94	6,995.03	6,917.54	26.58	25.33	-6.63	-682.30	325.82	690.19	639.62	50.57	13.649		
7,100.00	6,902.32	7,012.87	6,935.23	26.62	25.40	-7.43	-684.37	326.83	672.43	621.75	50.68	13.268		
7,125.00	6,919.79	7,029.87	6,952.09	26.65	25.46	-8.36	-686.29	327.81	653.79	603.00	50.79	12.873		
7,150.00	6,936.29	7,045.80	6,967.89	26.69	25.52	-9.46	-688.04	328.74	634.31	583.42	50.89	12.465		
7,175.00	6,951.79	7,060.61	6,982.59	26.72	25.57	-10.76	-689.62	329.62	614.05	563.07	50.98	12.045		
7,200.00	6,966.25	7,074.26	6,996.15	26.75	25.63	-12.33	-691.04	330.44	593.07	542.01	51.07	11.614		
7,225.00	6,979.61	7,086.72	7,008.52	26.78	25.67	-14.25	-692.31	331.20	571.44	520.30	51.14	11.173		
7,250.00	6,991.86	7,097.29	7,019.02	26.81	25.71	-16.59	-693.38	331.84	549.23	498.01	51.21	10.725		
7,275.00	7,002.94	7,106.69	7,028.35	26.84	25.75	-19.53	-694.34	332.41	526.49	475.22	51.27	10.269		
7,300.00	7,012.84	7,114.92	7,036.52	26.86	25.78	-23.32	-695.18	332.91	503.30	451.98	51.33	9.806		
7,325.00	7,021.52	7,121.95	7,043.50	26.88	25.80	-28.26	-695.91	333.33	479.73	428.35	51.37	9.338		
7,350.00	7,028.97	7,127.75	7,049.26	26.90	25.82	-34.79	-696.52	333.68	455.83	404.41	51.42	8.865		
7,375.00	7,035.15	7,132.31	7,053.79	26.92	25.84	-43.41	-697.00	333.95	431.69	380.23	51.46	8.389		
7,400.00	7,040.06	7,135.62	7,057.07	26.94	25.85	-54.55	-697.34	334.15	407.36	355.86	51.50	7.910		
7,425.00	7,043.68	7,137.67	7,059.10	26.95	25.86	-68.02	-697.56	334.27	382.92	331.39	51.53	7.431		
7,450.00	7,046.00	7,138.44	7,059.87	26.96	25.86	-82.51	-697.64	334.32	358.44	306.88	51.56	6.952		
7,475.00	7,047.01	7,137.93	7,059.36	26.97	25.86	-96.01	-697.59	334.29	334.00	282.41	51.59	6.474		
7,489.85	7,047.00	7,137.02	7,058.46	26.98	25.86	-102.92	-697.49	334.23	319.54	267.93	51.61	6.192		
7,500.00	7,046.83	7,136.24	7,057.69	26.98	25.86	-102.35	-697.41	334.19	309.67	258.05	51.62	5.999		

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 203H
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 203H	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)			
7,600.00	7,045.16	7,128.58	7,050.09	27.05	25.83	-96.59	-696.60	333.73	213.80	161.99	51.81	4.127	
7,700.00	7,043.49	7,120.88	7,042.44	27.15	25.80	-90.52	-695.80	333.27	124.10	71.85	52.25	2.375	
7,800.00	7,041.82	7,113.13	7,034.74	27.31	25.77	-84.27	-695.00	332.80	70.52	18.44	52.08	1.354	Collision Risk Procedures Req., ES, SF
7,804.45	7,041.75	7,112.78	7,034.40	27.32	25.77	-83.99	-694.96	332.78	70.50	18.53	51.97	1.357	Collision Risk Procedures Req., CC
7,900.00	7,040.15	7,105.33	7,027.00	27.51	25.74	-77.97	-694.20	332.33	120.10	69.53	50.57	2.375	
8,000.00	7,038.48	7,097.49	7,019.21	27.76	25.71	-71.79	-693.40	331.86	209.16	158.56	50.61	4.133	
8,100.00	7,036.81	7,089.60	7,011.38	28.06	25.68	-65.85	-692.60	331.37	304.88	254.19	50.70	6.014	
8,200.00	7,035.14	7,081.72	7,003.55	28.40	25.65	-60.30	-691.80	330.89	402.53	351.78	50.75	7.932	
8,300.00	7,033.48	7,073.92	6,995.81	28.79	25.62	-55.24	-691.01	330.42	500.99	450.21	50.78	9.866	
8,400.00	7,031.81	7,066.20	6,988.14	29.22	25.60	-50.66	-690.21	329.96	599.85	549.05	50.80	11.809	
8,500.00	7,030.14	7,058.55	6,980.55	29.70	25.57	-46.56	-689.40	329.50	698.95	648.14	50.81	13.757	
8,600.00	7,028.47	7,050.97	6,973.03	30.21	25.54	-42.88	-688.60	329.05	798.20	747.39	50.81	15.709	
8,700.00	7,026.80	7,043.47	6,965.59	30.75	25.51	-39.60	-687.79	328.61	897.56	846.74	50.81	17.664	
8,800.00	7,025.13	7,036.04	6,958.21	31.33	25.48	-36.68	-686.97	328.17	996.98	946.17	50.81	19.620	
8,900.00	7,023.46	7,028.68	6,950.91	31.94	25.46	-34.06	-686.16	327.74	1,096.46	1,045.65	50.81	21.579	
9,000.00	7,021.79	7,021.38	6,943.67	32.58	25.43	-31.71	-685.34	327.32	1,195.98	1,145.16	50.81	23.538	
9,100.00	7,020.12	7,014.16	6,936.51	33.25	25.40	-29.60	-684.52	326.90	1,295.53	1,244.72	50.81	25.498	
9,200.00	7,018.45	7,007.00	6,929.41	33.94	25.38	-27.69	-683.70	326.49	1,395.10	1,344.29	50.81	27.459	
9,300.00	7,016.78	6,999.91	6,922.38	34.66	25.35	-25.97	-682.88	326.09	1,494.70	1,443.89	50.81	29.420	
9,400.00	7,015.11	6,992.99	6,915.51	35.39	25.32	-24.43	-682.06	325.70	1,594.31	1,543.51	50.80	31.382	
9,500.00	7,013.45	6,992.99	6,915.51	36.15	25.32	-24.43	-682.06	325.70	1,693.95	1,643.15	50.81	33.340	
9,600.00	7,011.78	6,981.42	6,904.04	36.93	25.28	-22.12	-680.69	325.06	1,793.59	1,742.78	50.80	35.304	
9,700.00	7,010.11	6,975.90	6,898.58	37.72	25.26	-21.12	-680.02	324.77	1,893.25	1,842.45	50.81	37.264	
9,800.00	7,008.44	6,970.53	6,893.25	38.54	25.24	-20.21	-679.37	324.48	1,992.93	1,942.12	50.81	39.224	
9,900.00	7,006.77	6,965.29	6,888.06	39.36	25.22	-19.37	-678.74	324.21	2,092.62	2,041.81	50.81	41.183	
10,000.00	7,005.10	6,960.18	6,882.99	40.20	25.20	-18.60	-678.11	323.95	2,192.33	2,141.51	50.82	43.141	
10,100.00	7,003.43	6,955.20	6,878.06	41.06	25.18	-17.88	-677.50	323.70	2,292.04	2,241.22	50.82	45.099	
10,200.00	7,001.76	6,950.34	6,873.24	41.93	25.16	-17.21	-676.90	323.46	2,391.76	2,340.93	50.83	47.055	
10,300.00	7,000.09	6,945.60	6,868.54	42.81	25.15	-16.60	-676.31	323.23	2,491.49	2,440.66	50.84	49.010	

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 203H
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 203H	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						Rule Assigned:				Offset Well Error:	0.00 usft	
Measured Depth	Vertical	Measured Depth	Vertical	Reference	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
0.00	0.00	0.00	15.70	0.00	0.00	177.76	-2,058.40	80.50	2,060.03					
100.00	100.00	80.35	96.05	0.25	0.19	177.76	-2,058.45	80.61	2,060.03	2,059.58	0.44	4,631.659		
171.03	171.03	155.33	171.03	0.51	0.46	177.75	-2,058.39	80.78	2,059.97	2,059.01	0.96	2,140.896		
200.00	200.00	177.34	193.03	0.61	0.53	177.75	-2,058.45	80.88	2,060.05	2,058.91	1.14	1,801.567		
300.00	300.00	283.89	299.58	0.97	0.91	177.75	-2,058.61	81.04	2,060.21	2,058.33	1.87	1,099.679		
400.00	400.00	372.27	387.97	1.33	1.21	177.75	-2,058.97	80.78	2,060.59	2,058.05	2.54	812.031		
500.00	500.00	469.61	485.30	1.68	1.55	177.78	-2,059.73	79.85	2,061.33	2,058.10	3.24	637.067		
600.00	600.00	571.88	587.57	2.04	1.91	177.78	-2,060.42	79.71	2,062.00	2,058.04	3.96	521.183		
700.00	699.98	673.09	688.77	2.39	2.27	58.48	-2,060.98	79.75	2,061.64	2,056.98	4.66	442.209		
800.00	799.84	771.75	787.43	2.73	2.63	58.64	-2,061.54	79.70	2,059.47	2,054.12	5.35	384.735		
900.00	899.45	868.49	884.17	3.08	2.97	58.91	-2,062.18	79.68	2,055.61	2,049.56	6.04	340.156		
1,000.00	998.70	976.79	992.45	3.42	3.35	59.29	-2,062.84	80.94	2,049.96	2,043.19	6.78	302.552		
1,100.00	1,097.47	1,088.19	1,103.73	3.78	3.74	59.70	-2,062.67	86.22	2,041.92	2,034.40	7.52	271.650		
1,200.00	1,195.62	1,190.01	1,205.39	4.14	4.10	60.20	-2,062.15	91.69	2,031.82	2,023.59	8.23	246.908		
1,300.00	1,293.06	1,268.40	1,283.64	4.51	4.37	60.70	-2,062.07	96.42	2,020.50	2,011.63	8.87	227.869		
1,349.92	1,341.38	1,314.90	1,330.02	4.70	4.54	61.00	-2,062.31	99.77	2,014.56	2,005.35	9.21	218.638		
1,400.00	1,389.76	1,367.15	1,382.11	4.89	4.72	61.23	-2,062.54	103.94	2,008.37	1,998.79	9.58	209.584		
1,500.00	1,486.35	1,484.45	1,498.84	5.27	5.13	61.67	-2,062.40	115.40	1,995.56	1,985.19	10.37	192.490		
1,600.00	1,582.95	1,586.23	1,599.96	5.66	5.49	62.01	-2,061.66	126.91	1,982.22	1,971.12	11.10	178.547		
1,700.00	1,679.54	1,679.65	1,692.65	6.05	5.83	62.30	-2,061.09	138.58	1,969.05	1,957.24	11.81	166.688		
1,800.00	1,776.13	1,779.91	1,792.03	6.44	6.18	62.59	-2,060.58	151.85	1,956.02	1,943.47	12.55	155.840		
1,900.00	1,872.73	1,884.56	1,895.72	6.83	6.56	62.90	-2,059.83	165.90	1,942.83	1,929.52	13.31	145.983		
2,000.00	1,969.32	1,986.29	1,996.48	7.23	6.93	63.18	-2,058.82	179.92	1,929.40	1,915.34	14.06	137.239		
2,100.00	2,065.91	2,085.29	2,094.48	7.63	7.28	63.46	-2,057.85	193.92	1,916.02	1,901.21	14.80	129.439		
2,200.00	2,162.50	2,187.68	2,195.78	8.03	7.66	63.73	-2,056.70	208.71	1,902.53	1,886.97	15.56	122.271		
2,300.00	2,259.10	2,277.56	2,284.68	8.43	7.98	63.97	-2,055.68	221.95	1,889.08	1,872.80	16.28	116.049		
2,400.00	2,355.69	2,359.42	2,365.71	8.83	8.28	64.21	-2,055.46	233.57	1,876.52	1,859.55	16.97	110.566		
2,500.00	2,452.28	2,448.89	2,454.45	9.23	8.61	64.50	-2,055.83	244.95	1,864.75	1,847.06	17.69	105.398		
2,600.00	2,548.88	2,557.58	2,562.54	9.64	9.00	64.94	-2,056.13	256.36	1,853.07	1,834.59	18.48	100.286		
2,700.00	2,645.47	2,658.25	2,662.87	10.04	9.36	65.43	-2,055.55	264.55	1,840.78	1,821.54	19.24	95.693		
2,800.00	2,742.06	2,739.14	2,743.60	10.44	9.65	65.88	-2,055.46	269.59	1,829.24	1,809.31	19.93	91.783		
2,900.00	2,838.66	2,822.32	2,826.72	10.85	9.95	66.40	-2,056.09	272.70	1,818.88	1,798.25	20.63	88.162		
3,000.00	2,935.25	2,927.43	2,931.82	11.26	10.32	67.16	-2,056.55	273.78	1,808.72	1,787.32	21.40	84.515		
3,100.00	3,031.84	3,022.50	3,026.89	11.66	10.64	67.90	-2,056.74	273.51	1,798.77	1,776.64	22.13	81.288		
3,200.00	3,128.44	3,117.12	3,121.51	12.07	10.96	68.64	-2,056.97	272.87	1,789.23	1,766.38	22.85	78.307		
3,300.00	3,225.03	3,211.59	3,215.97	12.47	11.27	69.41	-2,057.30	272.00	1,780.16	1,756.59	23.57	75.521		
3,400.00	3,321.62	3,307.87	3,312.24	12.88	11.59	70.19	-2,057.66	271.11	1,771.47	1,747.17	24.30	72.892		
3,500.00	3,418.22	3,404.37	3,408.74	13.29	11.92	70.99	-2,058.03	270.08	1,763.17	1,738.13	25.04	70.423		
3,600.00	3,514.81	3,500.32	3,504.69	13.70	12.24	71.78	-2,058.37	269.10	1,755.19	1,729.42	25.77	68.107		
3,700.00	3,611.40	3,599.81	3,604.17	14.10	12.58	72.62	-2,058.75	268.05	1,747.62	1,721.10	26.52	65.901		
3,800.00	3,708.00	3,702.45	3,706.80	14.51	12.92	73.48	-2,058.76	267.09	1,740.04	1,712.76	27.28	63.790		
3,900.00	3,804.59	3,799.23	3,803.58	14.92	13.25	74.30	-2,058.64	266.46	1,732.66	1,704.64	28.02	61.839		
4,000.00	3,901.18	3,898.62	3,902.96	15.33	13.59	75.15	-2,058.49	265.68	1,725.65	1,696.88	28.77	59.980		
4,100.00	3,997.78	3,995.26	3,999.61	15.74	13.92	75.98	-2,058.20	265.20	1,718.82	1,689.31	29.51	58.236		
4,200.00	4,094.37	4,092.54	4,096.89	16.15	14.25	76.81	-2,057.98	264.71	1,712.43	1,682.17	30.26	56.585		
4,300.00	4,190.96	4,187.54	4,191.89	16.55	14.58	77.63	-2,057.76	264.41	1,706.38	1,675.38	31.00	55.036		
4,400.00	4,287.56	4,283.24	4,287.59	16.96	14.90	78.46	-2,057.63	264.01	1,700.83	1,669.08	31.75	53.570		
4,500.00	4,384.15	4,381.72	4,386.06	17.37	15.24	79.32	-2,057.42	263.50	1,695.63	1,663.12	32.50	52.166		
4,600.00	4,480.74	4,477.87	4,482.21	17.78	15.58	80.16	-2,057.21	263.23	1,690.74	1,657.49	33.25	50.843		
4,700.00	4,577.34	4,575.34	4,579.68	18.19	15.91	81.00	-2,057.14	263.32	1,686.26	1,652.25	34.01	49.580		
4,800.00	4,673.93	4,674.21	4,678.55	18.60	16.26	81.86	-2,057.06	263.69	1,682.06	1,647.29	34.77	48.371		
4,900.00	4,770.52	4,781.54	4,785.88	19.01	16.64	82.77	-2,056.73	264.49	1,677.90	1,642.34	35.57	47.176		

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 203H
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 203H	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)				
5,000.00	4,867.12	4,892.03	4,896.35	19.42	17.02	83.72	-2,055.70	265.84	1,673.38	1,637.01	36.37	46.012		
5,100.00	4,963.71	5,002.46	5,006.75	19.83	17.41	84.66	-2,053.89	267.75	1,668.41	1,631.24	37.17	44.888		
5,200.00	5,060.30	5,093.63	5,097.88	20.24	17.73	85.44	-2,051.97	269.59	1,663.30	1,625.40	37.91	43.877		
5,300.00	5,156.90	5,162.99	5,167.24	20.65	17.97	86.05	-2,051.26	270.13	1,659.95	1,621.38	38.57	43.033		
5,400.00	5,253.49	5,259.92	5,264.16	21.06	18.31	86.92	-2,050.80	270.19	1,657.83	1,618.50	39.33	42.153		
5,500.00	5,350.08	5,364.33	5,368.57	21.47	18.68	87.86	-2,049.86	270.36	1,655.70	1,615.59	40.11	41.280		
5,600.00	5,446.68	5,467.00	5,471.23	21.88	19.04	88.79	-2,048.51	270.76	1,653.52	1,612.64	40.88	40.444		
5,612.36	5,458.62	5,478.72	5,482.95	21.93	19.08	88.90	-2,048.34	270.81	1,653.27	1,612.29	40.98	40.347		
5,700.00	5,543.60	5,563.65	5,567.87	22.28	19.38	89.60	-2,047.07	271.03	1,651.68	1,610.05	41.63	39.672		
5,800.00	5,641.32	5,661.61	5,665.81	22.68	19.72	90.30	-2,045.53	271.45	1,650.04	1,607.67	42.37	38.940		
5,900.00	5,739.72	5,750.60	5,754.80	23.06	20.03	90.84	-2,044.59	271.80	1,649.08	1,606.01	43.07	38.288		
6,000.00	5,838.69	5,850.81	5,855.01	23.43	20.38	91.32	-2,043.72	272.43	1,648.27	1,604.48	43.79	37.637		
6,100.00	5,938.09	5,944.93	5,949.11	23.79	20.72	91.63	-2,043.73	273.59	1,647.92	1,603.43	44.48	37.046		
6,200.00	6,037.81	6,072.86	6,077.02	24.13	21.17	91.86	-2,043.02	276.30	1,646.56	1,601.28	45.28	36.363		
6,300.00	6,137.73	6,191.61	6,195.71	24.46	21.59	91.92	-2,040.69	279.33	1,643.68	1,597.65	46.03	35.710		
6,362.28	6,200.00	6,243.03	6,247.09	24.66	21.77	-148.76	-2,039.46	280.62	1,641.63	1,595.22	46.41	35.371		
6,400.00	6,237.72	6,271.02	6,275.08	24.78	21.87	-148.77	-2,038.94	281.15	1,640.66	1,594.04	46.63	35.187		
6,500.00	6,337.72	6,346.92	6,350.96	25.08	22.13	-148.78	-2,038.08	281.95	1,639.14	1,591.94	47.20	34.730		
6,600.00	6,437.72	6,434.16	6,438.20	25.38	22.44	-148.78	-2,037.98	282.11	1,638.92	1,591.12	47.80	34.285		
6,700.00	6,537.72	6,548.28	6,552.32	25.69	22.84	-148.79	-2,037.82	282.57	1,638.61	1,590.10	48.51	33.776		
6,731.88	6,569.60	6,588.03	6,592.06	25.79	22.98	-148.80	-2,037.54	282.98	1,638.25	1,589.50	48.75	33.603		
6,750.00	6,587.72	6,584.99	6,589.02	25.84	22.97	-59.65	-2,037.57	282.94	1,637.96	1,589.17	48.79	33.570		
6,775.00	6,612.66	6,614.12	6,618.16	25.91	23.07	-59.81	-2,037.44	283.20	1,636.92	1,587.95	48.97	33.430		
6,800.00	6,637.49	6,630.02	6,634.06	25.98	23.12	-60.02	-2,037.47	283.28	1,635.44	1,586.35	49.09	33.318		
6,825.00	6,662.13	6,645.81	6,649.85	26.05	23.18	-60.31	-2,037.58	283.31	1,633.45	1,584.25	49.20	33.199		
6,850.00	6,686.52	6,661.46	6,665.49	26.11	23.23	-60.68	-2,037.75	283.29	1,630.95	1,581.64	49.31	33.073		
6,875.00	6,710.59	6,679.99	6,684.02	26.17	23.30	-61.16	-2,038.05	283.21	1,627.97	1,578.54	49.44	32.931		
6,900.00	6,734.27	6,699.90	6,703.93	26.23	23.37	-61.73	-2,038.42	283.09	1,624.47	1,574.91	49.56	32.778		
6,925.00	6,757.50	6,724.35	6,728.37	26.29	23.45	-62.46	-2,038.87	282.98	1,620.37	1,570.67	49.70	32.603		
6,950.00	6,780.21	6,748.24	6,752.26	26.34	23.53	-63.30	-2,039.31	282.89	1,615.71	1,565.88	49.84	32.420		
6,975.00	6,802.35	6,771.51	6,775.53	26.39	23.61	-64.22	-2,039.73	282.83	1,610.52	1,560.55	49.97	32.230		
7,000.00	6,823.85	6,792.93	6,796.94	26.44	23.69	-65.22	-2,040.12	282.80	1,604.84	1,554.75	50.09	32.038		
7,025.00	6,844.65	6,813.40	6,817.40	26.49	23.76	-66.30	-2,040.52	282.81	1,598.72	1,548.51	50.21	31.842		
7,050.00	6,864.70	6,833.08	6,837.08	26.53	23.83	-67.46	-2,040.92	282.84	1,592.19	1,541.88	50.32	31.642		
7,075.00	6,883.94	6,851.91	6,855.91	26.58	23.89	-68.68	-2,041.33	282.91	1,585.32	1,534.89	50.42	31.440		
7,100.00	6,902.32	6,869.99	6,873.98	26.62	23.95	-69.96	-2,041.74	283.00	1,578.13	1,527.60	50.52	31.235		
7,125.00	6,919.79	6,895.90	6,899.89	26.65	24.04	-71.53	-2,042.23	283.09	1,570.63	1,519.97	50.65	31.007		
7,150.00	6,936.29	6,920.88	6,924.87	26.69	24.13	-73.16	-2,042.49	283.05	1,562.81	1,512.04	50.78	30.779		
7,175.00	6,951.79	6,944.62	6,948.61	26.72	24.21	-74.84	-2,042.54	282.90	1,554.75	1,503.86	50.89	30.552		
7,200.00	6,966.25	6,967.06	6,971.04	26.75	24.29	-76.54	-2,042.42	282.66	1,546.50	1,495.50	50.99	30.328		
7,225.00	6,979.61	6,979.49	6,983.47	26.78	24.33	-77.98	-2,042.33	282.52	1,538.16	1,487.10	51.06	30.124		
7,250.00	6,991.86	6,991.80	6,995.78	26.81	24.37	-79.43	-2,042.25	282.42	1,529.82	1,478.69	51.13	29.922		
7,275.00	7,002.94	7,002.89	7,006.87	26.84	24.41	-80.86	-2,042.18	282.34	1,521.52	1,470.33	51.19	29.726		
7,300.00	7,012.84	7,012.73	7,016.71	26.86	24.45	-82.25	-2,042.14	282.29	1,513.32	1,462.08	51.24	29.536		
7,325.00	7,021.52	7,021.32	7,025.30	26.88	24.48	-83.58	-2,042.10	282.26	1,505.26	1,453.98	51.28	29.353		
7,350.00	7,028.97	7,028.64	7,032.62	26.90	24.50	-84.85	-2,042.07	282.24	1,497.40	1,446.08	51.32	29.178		
7,375.00	7,035.15	7,034.68	7,038.66	26.92	24.52	-86.04	-2,042.06	282.23	1,489.77	1,438.42	51.35	29.011		
7,400.00	7,040.06	7,039.44	7,043.42	26.94	24.54	-87.15	-2,042.04	282.23	1,482.41	1,431.04	51.38	28.854		
7,425.00	7,043.68	7,042.92	7,046.91	26.95	24.55	-88.17	-2,042.04	282.23	1,475.37	1,423.98	51.39	28.708		
7,450.00	7,046.00	7,045.13	7,049.12	26.96	24.56	-89.09	-2,042.03	282.23	1,468.67	1,417.27	51.40	28.572		
7,475.00	7,047.01	7,046.08	7,050.06	26.97	24.56	-89.91	-2,042.03	282.23	1,462.35	1,410.94	51.40	28.448		
7,489.85	7,047.00	7,046.05	7,050.03	26.98	24.56	-90.35	-2,042.03	282.23	1,458.78	1,407.38	51.40	28.379		

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 203H
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 203H	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		Rule Assigned:	
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
7,500.00	7,046.83	7,045.88	7,049.86	26.98	24.56	-90.35	-2,042.03	282.23	1,456.42	1,405.02	51.40	28.334
7,600.00	7,045.16	7,044.22	7,048.20	27.05	24.56	-90.28	-2,042.03	282.23	1,436.84	1,385.42	51.42	27.945
7,700.00	7,043.49	7,042.61	7,046.59	27.15	24.55	-90.22	-2,042.04	282.23	1,424.02	1,372.55	51.47	27.667
7,800.00	7,041.82	7,041.05	7,045.03	27.31	24.55	-90.15	-2,042.04	282.23	1,418.16	1,366.59	51.56	27.504
7,833.39	7,041.26	7,040.54	7,044.52	27.37	24.54	-90.13	-2,042.04	282.23	1,417.76	1,366.16	51.61	27.473 CC, ES
7,900.00	7,040.15	7,039.54	7,043.52	27.51	24.54	-90.09	-2,042.04	282.23	1,419.33	1,367.63	51.69	27.458 SF
8,000.00	7,038.48	7,038.06	7,042.05	27.76	24.54	-90.03	-2,042.05	282.23	1,427.52	1,375.66	51.85	27.530
8,100.00	7,036.81	7,036.64	7,040.62	28.06	24.53	-89.97	-2,042.05	282.23	1,442.61	1,390.57	52.04	27.721
8,200.00	7,035.14	7,035.25	7,039.23	28.40	24.53	-89.92	-2,042.06	282.23	1,464.38	1,412.14	52.24	28.030
8,300.00	7,033.48	7,033.90	7,037.88	28.79	24.52	-89.86	-2,042.06	282.23	1,492.55	1,440.09	52.46	28.451
8,400.00	7,031.81	7,032.59	7,036.57	29.22	24.52	-89.81	-2,042.06	282.23	1,526.77	1,474.09	52.68	28.982
8,500.00	7,030.14	7,031.31	7,035.29	29.70	24.51	-89.76	-2,042.07	282.24	1,566.62	1,513.73	52.90	29.617
8,600.00	7,028.47	7,030.07	7,034.05	30.21	24.51	-89.71	-2,042.07	282.24	1,611.71	1,558.60	53.11	30.349
8,700.00	7,026.80	7,028.86	7,032.84	30.75	24.50	-89.66	-2,042.07	282.24	1,661.59	1,608.29	53.30	31.172
8,800.00	7,025.13	7,027.68	7,031.66	31.33	24.50	-89.61	-2,042.08	282.24	1,715.86	1,662.37	53.49	32.078
8,900.00	7,023.46	7,026.53	7,030.51	31.94	24.50	-89.57	-2,042.08	282.24	1,774.10	1,720.44	53.66	33.060
9,000.00	7,021.79	7,025.41	7,029.39	32.58	24.49	-89.52	-2,042.09	282.25	1,835.95	1,782.13	53.82	34.112
9,100.00	7,020.12	7,024.32	7,028.30	33.25	24.49	-89.48	-2,042.09	282.25	1,901.05	1,847.08	53.97	35.226
9,200.00	7,018.45	7,023.26	7,027.24	33.94	24.48	-89.43	-2,042.09	282.25	1,969.08	1,914.98	54.10	36.398
9,300.00	7,016.78	7,022.22	7,026.20	34.66	24.48	-89.39	-2,042.10	282.25	2,039.74	1,985.52	54.22	37.622
9,400.00	7,015.11	7,021.20	7,025.19	35.39	24.48	-89.35	-2,042.10	282.26	2,112.77	2,058.44	54.32	38.891
9,500.00	7,013.45	7,020.22	7,024.20	36.15	24.47	-89.31	-2,042.10	282.26	2,187.93	2,133.51	54.42	40.203
9,600.00	7,011.78	7,019.25	7,023.23	36.93	24.47	-89.27	-2,042.11	282.26	2,265.02	2,210.51	54.51	41.552
9,700.00	7,010.11	7,018.31	7,022.29	37.72	24.47	-89.23	-2,042.11	282.27	2,343.84	2,289.24	54.59	42.935
9,800.00	7,008.44	7,017.39	7,021.37	38.54	24.46	-89.20	-2,042.12	282.27	2,424.22	2,369.55	54.66	44.348

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 203H
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 203H	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		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		
0.00	0.00	0.00	20.00	0.00	0.00	-29.61	2,152.82	-1,223.57	2,476.32					
100.00	100.00	80.00	100.00	0.25	4.00	-29.61	2,152.82	-1,223.57	2,476.24	2,471.98	4.25	582.098		
200.00	200.00	180.00	200.00	0.61	9.01	-29.61	2,152.82	-1,223.57	2,476.24	2,466.62	9.62	257.512		
300.00	300.00	280.00	300.00	0.97	14.01	-29.61	2,152.82	-1,223.57	2,476.24	2,461.26	14.98	165.324		
400.00	400.00	380.00	400.00	1.33	19.01	-29.61	2,152.82	-1,223.57	2,476.24	2,455.90	20.34	121.742		
500.00	500.00	480.00	500.00	1.68	24.02	-29.61	2,152.82	-1,223.57	2,476.24	2,450.53	25.70	96.344		
600.00	600.00	580.00	600.00	2.04	28.26	-29.61	2,152.82	-1,223.57	2,476.24	2,445.93	30.31	81.708 CC		
700.00	699.98	679.98	699.98	2.39	32.32	-148.97	2,152.82	-1,223.57	2,477.73	2,443.03	34.71	71.390 ES		
800.00	799.84	779.84	799.84	2.73	36.37	-148.99	2,152.82	-1,223.57	2,482.22	2,443.12	39.10	63.488		
900.00	899.45	879.45	899.45	3.08	40.41	-149.01	2,152.82	-1,223.57	2,489.70	2,446.21	43.48	57.257 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 203H
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 203H	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 - WHITE THORN 26 STATE COM #001 - OH - OH												Offset Site Error: 0.00 usft	
Survey Program: 207-INC-ONLY												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
12,200.00	6,968.38	6,904.72	6,961.00	61.11	140.43	-91.39	-1,707.37	-6,238.00	2,458.63	2,281.35	177.28	13.869	
12,300.00	6,966.71	6,903.22	6,959.50	62.13	140.40	-91.32	-1,707.36	-6,238.00	2,371.33	2,192.97	178.36	13.296	
12,400.00	6,965.04	6,901.72	6,958.00	63.15	140.36	-91.25	-1,707.35	-6,238.00	2,285.07	2,105.53	179.54	12.728	
12,500.00	6,963.37	6,900.22	6,956.50	64.18	140.33	-91.18	-1,707.34	-6,238.00	2,199.97	2,019.14	180.83	12.166	
12,600.00	6,961.70	6,898.72	6,955.00	65.21	140.29	-91.10	-1,707.33	-6,238.00	2,116.18	1,933.92	182.26	11.611	
12,700.00	6,960.03	6,897.22	6,953.50	66.24	140.26	-91.03	-1,707.32	-6,238.00	2,033.84	1,850.03	183.81	11.065	
12,800.00	6,958.36	6,895.72	6,952.00	67.27	140.22	-90.96	-1,707.31	-6,238.00	1,953.16	1,767.65	185.51	10.529	
12,900.00	6,956.69	6,894.23	6,950.51	68.31	140.18	-90.88	-1,707.30	-6,238.00	1,874.34	1,686.98	187.36	10.004	
13,000.00	6,955.03	6,892.73	6,949.01	69.35	140.15	-90.81	-1,707.30	-6,238.00	1,797.63	1,608.25	189.38	9.492	
13,100.00	6,953.36	6,891.23	6,947.51	70.40	140.11	-90.74	-1,707.29	-6,238.00	1,723.30	1,531.75	191.56	8.996	
13,200.00	6,951.69	6,889.73	6,946.01	71.44	140.08	-90.67	-1,707.28	-6,238.00	1,651.69	1,457.78	193.91	8.518	
13,300.00	6,950.02	6,888.24	6,944.52	72.49	140.04	-90.59	-1,707.27	-6,238.00	1,583.15	1,386.73	196.42	8.060	
13,400.00	6,948.35	6,886.74	6,943.02	73.54	140.01	-90.52	-1,707.27	-6,238.00	1,518.11	1,319.01	199.10	7.625	
13,500.00	6,946.68	6,885.24	6,941.52	74.60	139.97	-90.45	-1,707.26	-6,238.00	1,457.03	1,255.12	201.91	7.216	
13,600.00	6,945.01	6,883.75	6,940.03	75.65	139.94	-90.37	-1,707.25	-6,238.00	1,400.43	1,195.61	204.83	6.837	
13,700.00	6,943.34	6,882.25	6,938.53	76.71	139.90	-90.30	-1,707.25	-6,238.00	1,348.89	1,141.08	207.81	6.491	
13,800.00	6,941.67	6,880.76	6,937.04	77.77	139.87	-90.23	-1,707.24	-6,238.00	1,302.98	1,092.19	210.79	6.181	
13,900.00	6,940.00	6,879.26	6,935.55	78.83	139.83	-90.16	-1,707.23	-6,238.00	1,263.34	1,049.64	213.69	5.912	
14,000.00	6,938.33	6,877.77	6,934.05	79.89	139.80	-90.08	-1,707.23	-6,238.00	1,230.56	1,014.13	216.43	5.686	
14,100.00	6,936.67	6,876.27	6,932.56	80.96	139.76	-90.01	-1,707.22	-6,238.00	1,205.21	986.31	218.90	5.506	
14,200.00	6,935.00	6,874.78	6,931.06	82.02	139.73	-89.94	-1,707.22	-6,238.00	1,187.77	966.76	221.00	5.374	
14,300.00	6,933.33	6,873.29	6,929.57	83.09	139.69	-89.86	-1,707.21	-6,238.00	1,178.57	955.92	222.66	5.293	
14,358.81	6,932.35	6,872.41	6,928.69	83.72	139.67	-89.82	-1,707.21	-6,238.00	1,177.10	953.72	223.39	5.269 CC, ES	
14,400.00	6,931.66	6,871.80	6,928.08	84.16	139.66	-89.79	-1,707.21	-6,238.00	1,177.83	954.03	223.79	5.263 SF	
14,500.00	6,929.99	6,870.30	6,926.59	85.23	139.62	-89.72	-1,707.20	-6,238.00	1,185.54	961.15	224.39	5.283	
14,600.00	6,928.32	6,868.81	6,925.10	86.30	139.59	-89.65	-1,707.20	-6,238.00	1,201.56	977.11	224.45	5.353	
14,700.00	6,926.65	6,867.32	6,923.61	87.38	139.55	-89.57	-1,707.20	-6,238.00	1,225.54	1,001.53	224.01	5.471	
14,800.00	6,924.98	6,865.83	6,922.11	88.45	139.52	-89.50	-1,707.19	-6,238.00	1,257.05	1,033.91	223.14	5.633	
14,900.00	6,923.31	6,864.34	6,920.62	89.53	139.48	-89.43	-1,707.19	-6,238.00	1,295.53	1,073.61	221.92	5.838	
15,000.00	6,921.64	6,862.85	6,919.13	90.61	139.45	-89.36	-1,707.19	-6,238.00	1,340.37	1,119.94	220.43	6.081	
15,100.00	6,919.97	6,861.36	6,917.64	91.69	139.41	-89.28	-1,707.18	-6,238.00	1,390.97	1,172.22	218.75	6.359	
15,200.00	6,918.30	6,859.87	6,916.16	92.77	139.37	-89.21	-1,707.18	-6,238.00	1,446.72	1,229.77	216.95	6.668	
15,300.00	6,916.64	6,858.38	6,914.67	93.85	139.34	-89.14	-1,707.18	-6,238.00	1,507.05	1,291.96	215.09	7.007	
15,400.00	6,914.97	6,856.89	6,913.18	94.93	139.30	-89.07	-1,707.18	-6,238.00	1,571.43	1,358.21	213.22	7.370	
15,500.00	6,913.30	6,855.41	6,911.69	96.01	139.27	-88.99	-1,707.17	-6,238.00	1,639.38	1,428.02	211.36	7.756	
15,600.00	6,911.63	6,853.92	6,910.20	97.10	139.23	-88.92	-1,707.17	-6,238.00	1,710.48	1,500.92	209.56	8.162	
15,700.00	6,909.96	6,852.43	6,908.72	98.18	139.20	-88.85	-1,707.17	-6,238.00	1,784.36	1,576.54	207.82	8.586	
15,800.00	6,908.29	6,850.94	6,907.23	99.27	139.16	-88.78	-1,707.17	-6,238.00	1,860.67	1,654.52	206.15	9.026	
15,900.00	6,906.62	6,849.46	6,905.74	100.36	139.13	-88.71	-1,707.17	-6,238.00	1,939.14	1,734.58	204.56	9.479	
16,000.00	6,904.95	6,847.97	6,904.26	101.44	139.09	-88.63	-1,707.17	-6,238.00	2,019.51	1,816.45	203.06	9.945	
16,100.00	6,903.28	6,846.49	6,902.77	102.53	139.06	-88.56	-1,707.17	-6,238.00	2,101.57	1,899.93	201.64	10.422	
16,200.00	6,901.61	6,845.00	6,901.29	103.62	139.02	-88.49	-1,707.17	-6,238.00	2,185.11	1,984.81	200.30	10.909	
16,300.00	6,899.94	6,843.52	6,899.80	104.71	138.99	-88.42	-1,707.16	-6,238.00	2,269.99	2,070.95	199.05	11.404	
16,400.00	6,898.28	6,841.98	6,898.28	105.80	138.95	-88.34	-1,707.99	-6,238.00	2,356.48	2,158.60	197.89	11.908	
16,500.00	6,896.61	6,840.31	6,896.61	106.89	138.91	-88.26	-1,707.99	-6,238.00	2,443.59	2,246.82	196.77	12.418	

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

Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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

Coordinates are relative to: Camacho 25-26 State Com 203H

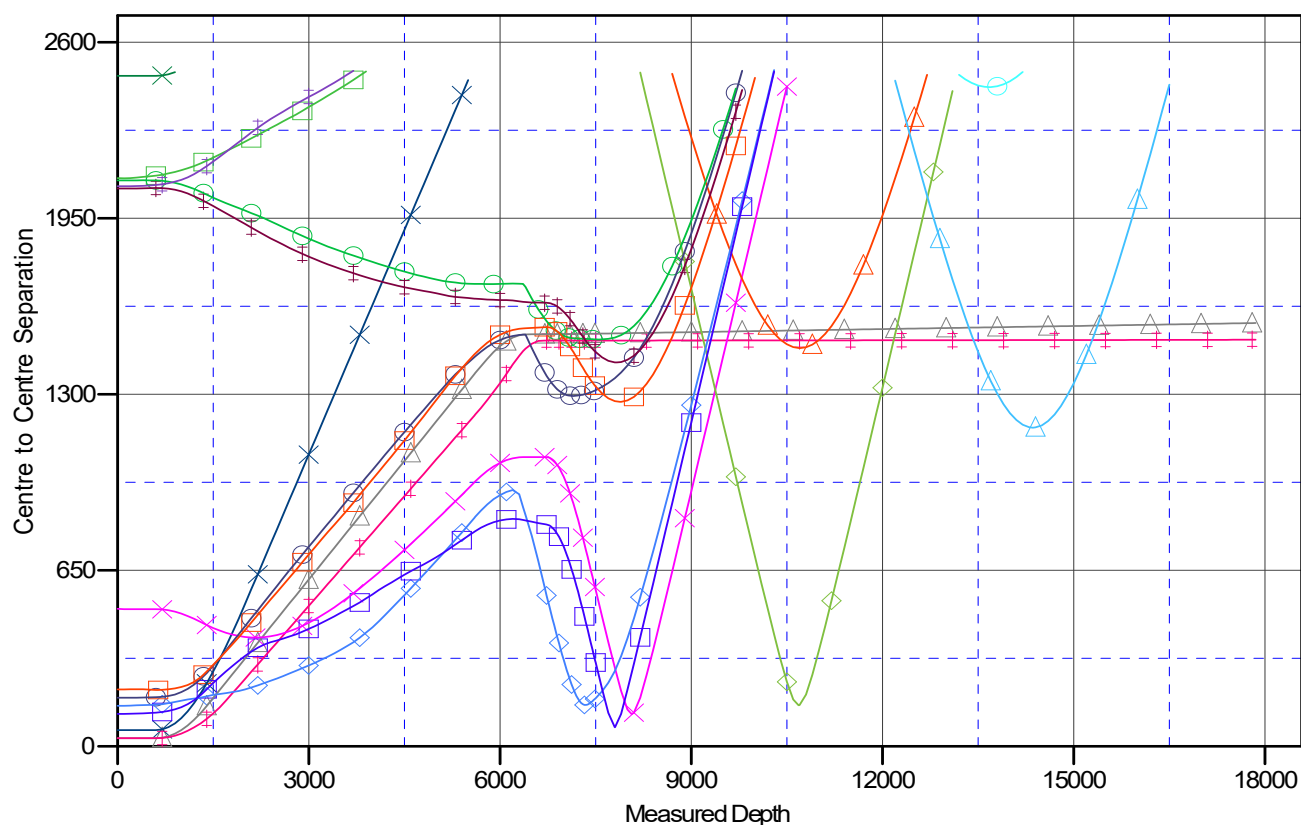
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.333334

Grid Convergence at Surface is: 0.06°

Ladder Plot



LEGEND

Camacho 25-26 State Com 203H, OH, Plan#1 V0	LAKEWOOD STATECOM#001, OH, OH V0	Palmbk29-30 378H, OH, OH V0
Camacho 25-26 State Com 201H, OH, Plan#1 V0	Palmbk29-30 271H, OH, OH V0	Palmbk29-30 377H, OH, OH V0
Camacho 25-26 State Com 204H, OH, Plan#1 V0	Palmbk29-30 272H, OH, OH V0	Palmbk29-30 378H, OH, OH V0
ANGELL RANCH #001, OH, OH V0	Palmbk29-30 273H, OH, OH V0	STATEE-42021, OH, OH V0
EDDYGL STATECOM#001, OH, OH V0	Palmbk29-30 274H, OH, OH V0	WHITEHORN 26STATECOM#001, OH, OH V0
GUARDIAN 25 STATECOM#001, OH, OH V0	Palmbk29-30 375H, OH, OH V0	

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

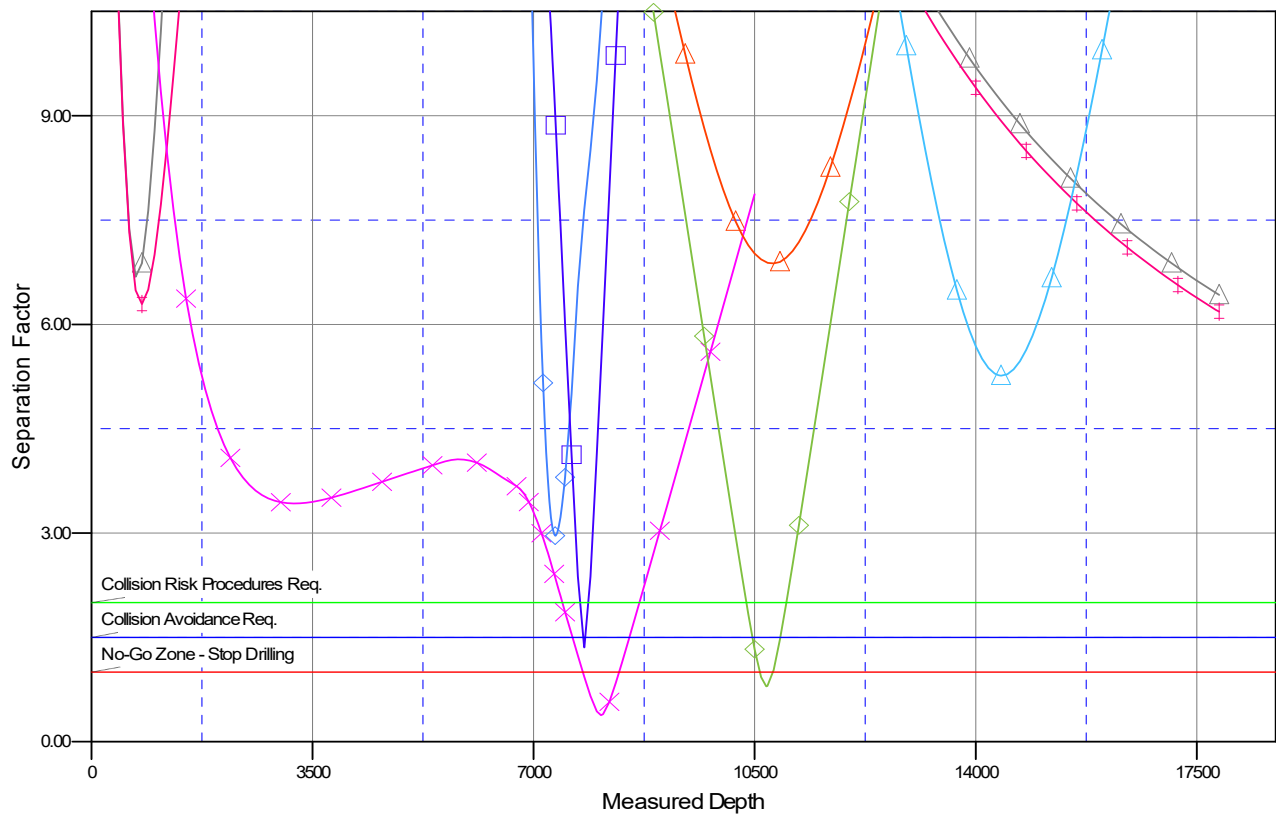
Anticollision Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well Camacho 25-26 State Com 203H
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 203H	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 203H
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 203H, OH, Plan #1 V0	LAKEWOOD STATE COM #001, OH, OH V0	Palmbk29-30 378H, OH, OH V0
Camacho 25-26 State Com 201H, OH, Plan #1 V0	Palmbk29-30 271H, OH, OH V0	Palmbk29-30 377H, OH, OH V0
Camacho 25-26 State Com 204H, OH, Plan #1 V0	Palmbk29-30 272H, OH, OH V0	Palmbk29-30 378H, OH, OH V0
ANGELL RANCH 26 #001, OH, OH V0	Palmbk29-30 273H, OH, OH V0	STATEE-42021, OH, OH V0
EDDYGL STATE COM #001, OH, OH V0	Palmbk29-30 274H, OH, OH V0	WHITEHORN 26 STATE COM #001, OH, OH V0
GUARDIAN 25 STATE COM #001, OH, OH V0	Palmbk29-30 375H, 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 DepartmentSubmit Electronically
Via E-permittingOil 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>
Printed Name:	Sorina L Flores
Title:	Sr Regulatory Analyst
E-mail Address:	sorina.flores@apachecorp.com
Date:	
Phone:	432-818-1167
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