

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-45801
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name <325175> PALMILLO 10 STATE COM
8. Well Number 243H
9. OGRID Number 873
10. Pool name or Wildcat <96413> PALMILLO; BONE SPRING, SW

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator APACHE CORPORATION	
3. Address of Operator 3000 VETERANS AIRPARK LN #1000 MIDLAND, TX 79705	
4. Well Location Unit Letter H : 2080' feet from the NORTH line and 180' feet from the EAST line Section 3 Township 19S Range 28E NMPM County EDDY	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL:3485'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Apache respectfully request to change SHL to Palmillo 3 State Com 243H. Moving SHL to accommodate 2 more wells, #244H & 356H
This will also slightly change production setting depth and cement as listed below:

OLD: SHL - Sec 3, 2050' FNL & 180' FWL FTP - Sec 3, 1794' FNL & 100' FEL
NEW SHL - Sec 3, 2080' FNL & 180' FEL ✓ FTP - Sec 3, 1795' FNL & 100' FWL

OLD Prod - 8-3/4" - setting depth: 7740' Est TOC: 2500' Total sx cmt: 615sx
8-1/2" - setting depth: 12314' Est TOC - 7740' Total sx cmt: 853sx

NEW Prod - 8-3/4" - setting depth: 7730' Est TOC: 2500' Total sx cmt: 615sx
8-1/2" - setting depth: 12324' Est TOC - 7730' Total sx cmt: 857sx

RECEIVED

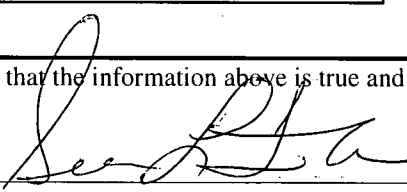
DEC 13 2019

DISTRICT I-ARTESIA O.C.D.

Spud Date:

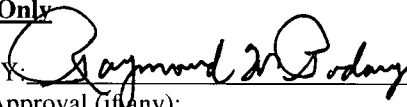
Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Supv Drlg Services DATE 12/9/19

Type or print name Sorina L Flores E-mail address: sorina.flores@apachecorp.com PHONE: 432-818-1167

For State Use Only

APPROVED BY:  TITLE Geologist DATE 2-17-2020

Conditions of Approval (if any):

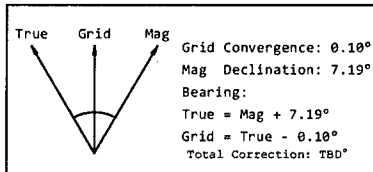
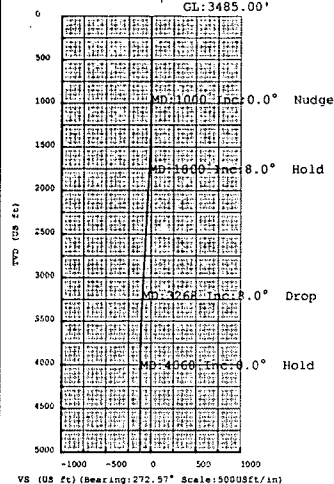
**5D Plan Report****Apache Corporation****Field Name:** *Apache NM (Nad 83 NMEZ)***Site Name:** *Palmillo 3 State Com (356,244,243,354) Pad***Well Name:** *Palmillo 3 State Com 243H***Plan:** *P1:V3 (Current plan)*

20 November 2019



Apache

Palmillo 3 State Com 243H Eddy Co, New Mexico



Plan Data for Palmillo 3 State Com 243H

Plan Point Information:									
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS Comments
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)	
0.00	0.00	0.00	-0.00	0.00	0.00	615301.80	595825.00	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00	0.00	615301.80	595825.00	0.00	0.00 Nudge
1800.30	8.00	24.70	1797.70	50.70	23.32	615352.50	595848.32	-21.02	1.00 Hold
3267.69	8.00	24.70	3250.80	236.30	108.68	615538.10	595933.68	-97.98	0.00 Drop
4067.99	0.00	0.00	4048.50	287.00	132.00	615588.80	595957.00	-119.00	1.00 Hold
6969.99	0.00	0.00	6950.50	287.00	132.00	615588.80	595957.00	-119.00	0.00 KOP
7730.59	91.27	269.26	7427.85	280.71	-356.02	615582.51	595468.98	368.25	12.00 LP
8399.62	91.27	269.26	7413.00	272.09	-1024.83	615573.89	594800.17	1036.00	0.00 TI/Build
8644.96	96.18	269.26	7397.07	268.94	-1269.55	615570.74	594555.45	1280.34	2.00 Hold
8814.49	96.18	269.26	7378.82	266.76	-1438.09	615568.56	594386.91	1448.60	0.00 Drop
9054.87	91.37	269.26	7363.00	263.68	-1677.86	615565.48	594147.14	1688.00	2.00 T2
10280.56	91.37	269.26	7333.68	247.94	-2903.10	615549.74	592921.90	2911.29	0.00 Drop
10377.43	89.43	269.26	7333.00	246.70	-2999.95	615548.50	592825.05	3007.99	2.00 T3
11124.47	89.43	269.26	7340.39	237.11	-3746.89	615538.91	592078.11	3753.75	0.00 Build
11346.23	93.87	269.26	7334.00	234.26	-3968.49	615536.06	591856.51	3975.00	2.00 T4
12324.45	93.87	269.26	7268.00	221.70	-4944.40	615523.50	590880.60	4949.37	0.00 PBHL 243H

Plan Data for Palmillo 3 State Com 243H

Target Set Information:						
Name: Palmillo3 243H						
Position offsets from Slot centre						
Name	TVD	Elevation	+N/-S	+E/-W	Northing	Easting
	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
VP	6950.50	-3439.50	287.00	132.00	615588.80	595957.00
FTP 243H	0.00	3511.00	287.00	82.70	615588.80	595907.70
LP	7428.00	-3917.00	280.83	-346.75	615582.63	595478.25
T1	7413.00	-3902.00	272.09	-1024.83	615573.89	594800.17
T2	7363.00	-3852.00	263.68	-1677.86	615565.48	594147.14
T3	7333.00	-3822.00	246.70	-2999.95	615548.50	592825.05
T4	7334.00	-3823.00	234.26	-3968.49	615536.06	591856.51
LTP 243H	7271.37	-3760.37	222.40	-4894.40	615524.20	590930.60
PBHL 243H	7268.00	-3757.00	221.70	-4944.40	615523.50	590880.60

Plan Data for Palmillo 3 State Com 243H

Field: Apache NM (Nad 83 NMEZ)
Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / New Mexico East (ftUS)

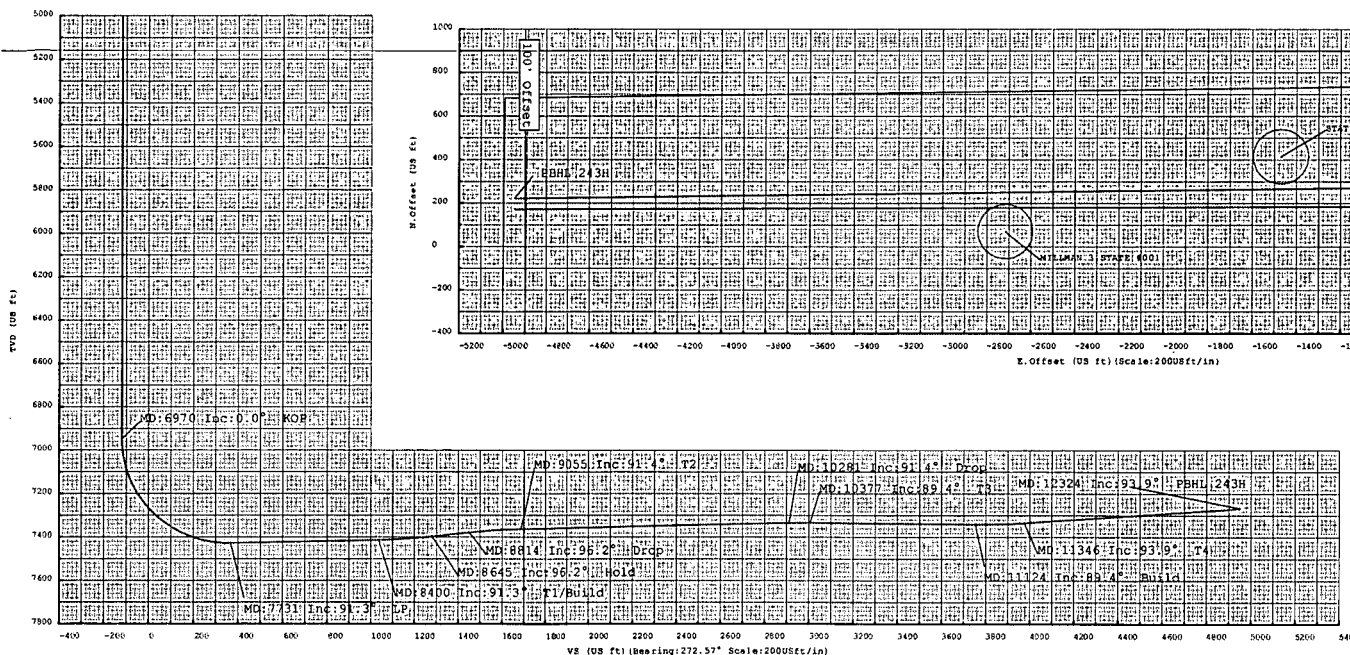
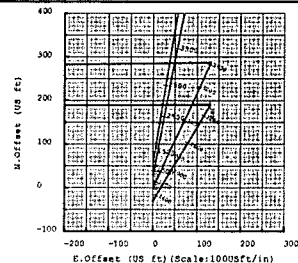
Site: Palmillo 3 State Com (356,244,243,354) Pad
Unit: USFeet
Company Name: Apache Corporation

Position:
Northing: 615361.80USft Latitude: 32.691548°
Easting: 595825.60USft Longitude: -104.156216°
North Reference: Grid
Grid Convergence: 0.10°
Elevation Above VRD: 3484.00USft
Comment: Eddy Co., NM

Slot: Palmillo 3 State Com 243H
Position:
Offset is from Site centre
+N/-S: -60.00USft Northing: 615361.80USft Latitude: 32.691383°
+E/-W: -0.60USft Easting: 595825.00USft Longitude: -104.156219°
Elevation Above VRD: 3485.00USft

Well: Palmillo 3 State Com 243H
Type: Main-Well
File Number:
Plan Folder: P1
Plan: P1:V3
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft
Azimuth: 272.57°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bggm2019 47870(nT) 7.19° 60.40° 2019-12-25

Palmillo 3 State Com 243H
Palmillo 3 State Com 354H
Palmillo 3 State Com 356H
Palmillo 3 State Com 244H



Drawing By: Ty Hardin Date: 11 November 2019
Office Name: Drilling Services - Houston
Address: 12101 Cutten Road
Houston, TX 77066
Phone: +1.713.882.8256


Weatherford®

Palmillo 3 State Com 243H

Field Name: Apache NM (Nad 83 NMEZ)	Map Units: US ft Vertical Reference Datum (VRD): Mean Sea Level Projected Coordinate System: NAD83 / New Mexico East (ftUS) Comment:		Company Name: Apache Corporation	
Site: Palmillo 3 State Com (356,244,243.35 4) Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.10	
	Position:	Northing: 615361.80 US ft Easting: 595825.60 US ft	Latitude: 32.691547774 Longitude: -104.156216364	
	Elevation above MSL: 3484.00 US ft Comment: Eddy Co., NM			
Slot: Palmillo 3 State Com 243H	Position (Relative to Site Centre)			
	+N/-S: -60.00 US ft +E/-W: -0.60 US ft		Latitude: 32.691382856 Longitude: -104.156218640	
	Slot TVD Reference: Ground Elevation Elevation above MSL: 3485.00 US ft Comment:			
Well: Palmillo 3 State Com 243H	Type: Main well		UWI:	
	File Number:		Plan: P1:V3 (Current plan)	
	Comment:			
	Closure Distance: 4949.37 US ft		Closure Azimuth: 272.57°	
	Vertical Section: Position of Origin (Relative to Slot centre) +N/-S: 0.00 US ft +E/-W: 0.00 US ft Az: 272.57°			
Magnetic Parameters:				
Model: bggm2019		Field Strength: 47870.9nT	Declination: 7.19°	Dip: 60.40° Date: 25/Dec/2019

Drill floor: Plan: P1:V3 (Current plan)
Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3511.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Target set: Palmillo3 243H Comment:

Target Name:	Shape:	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	C. Pt. Distance (US ft)	Comment
VP	Point	6950.50	287.00	132.00	615588.80	595957.00	0.00	
FTP 243H	Point	0.00	287.00	82.70	615588.80	595907.70	298.68	
LP	Point	7428.00	280.83	-346.75	615582.63	595478.25	0.04	
T1	Point	7413.00	272.09	-1024.83	615573.89	594800.17	0.00	
T2	Point	7363.00	263.68	-1677.86	615565.48	594147.14	0.00	
T3	Point	7333.00	246.70	-2999.95	615548.50	592825.05	0.00	
T4	Point	7334.00	234.26	-3968.49	615536.06	591856.51	0.00	
LTP 243H	Point	7271.37	222.40	-4894.40	615524.20	590930.60	0.06	
PBHL 243H	Point	7268.00	221.70	-4944.40	615523.50	590880.60	0.00	

5D Plan Report

Tie Point:					
MD: 0.00USFt	Inclination: 0.00°	Azimuth: 0.00°	TVD: -0.00USFt	North Offset: 0.00USFt	East Offset: 0.00USFt

Wellpath created using minimum curvature.

Salient Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	-0.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	615301.80	595825.00	0.00	Nudge
1800.30	8.00	24.70	1797.70	-21.02	50.70	23.32	615352.50	595848.32	1.00	Hold
3267.69	8.00	24.70	3250.80	-97.98	236.30	108.68	615538.10	595933.68	0.00	Drop
4067.99	0.00	0.00	4048.50	-119.00	287.00	132.00	615588.80	595957.00	1.00	Hold
6969.99	0.00	0.00	6950.50	-119.00	287.00	132.00	615588.80	595957.00	0.00	KOP
7730.59	91.27	269.26	7427.85	368.25	280.71	-356.02	615582.51	595468.98	12.00	LP
8399.62	91.27	269.26	7413.00	1036.00	272.09	-1024.83	615573.89	594800.17	0.00	T1/Build
8644.96	96.18	269.26	7397.07	1280.34	268.94	-1269.55	615570.74	594555.45	2.00	Hold
8814.49	96.18	269.26	7378.82	1448.60	266.76	-1438.09	615568.56	594386.91	0.00	Drop
9054.87	91.37	269.26	7363.00	1688.00	263.68	-1677.86	615565.48	594147.14	2.00	T2
10280.56	91.37	269.26	7333.68	2911.29	247.94	-2903.10	615549.74	592921.90	0.00	Drop
10377.43	89.43	269.26	7333.00	3007.99	246.70	-2999.95	615548.50	592825.05	2.00	T3
11124.47	89.43	269.26	7340.39	3753.75	237.11	-3746.89	615538.91	592078.11	0.00	Build
11346.23	93.87	269.26	7334.00	3975.00	234.26	-3968.49	615536.06	591856.51	2.00	T4
12324.45	93.87	269.26	7268.00	4949.37	221.70	-4944.40	615523.50	590880.60	0.00	PBHL 243H

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US.ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	-0.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	615301.80	595825.00	0.00	
1100.00	1.00	24.70	1099.99	-0.33	0.79	0.36	615302.59	595825.36	1.00	Nudge
1200.00	2.00	24.70	1199.96	-1.31	3.17	1.46	615304.97	595826.46	1.00	
1300.00	3.00	24.70	1299.86	-2.96	7.13	3.28	615308.93	595828.28	1.00	
1400.00	4.00	24.70	1399.68	-5.26	12.68	5.83	615314.48	595830.83	1.00	
1500.00	5.00	24.70	1499.37	-8.21	19.81	9.11	615321.61	595834.11	1.00	
1600.00	6.00	24.70	1598.90	-11.82	28.52	13.12	615330.32	595838.12	1.00	
1700.00	7.00	24.70	1698.26	-16.09	38.80	17.85	615340.60	595842.85	1.00	
1800.00	8.00	24.70	1797.40	-21.00	50.66	23.30	615352.46	595848.30	1.00	
1800.30	8.00	24.70	1797.70	-21.02	50.70	23.32	615352.50	595848.32	0.00	Hold
1900.00	8.00	24.70	1896.43	-26.25	63.31	29.12	615365.11	595854.12	0.00	
2000.00	8.00	24.70	1995.46	-31.49	75.96	34.93	615377.76	595859.93	0.00	
2100.00	8.00	24.70	2094.48	-36.74	88.60	40.75	615390.40	595865.75	0.00	
2200.00	8.00	24.70	2193.51	-41.98	101.25	46.57	615403.05	595871.57	0.00	
2300.00	8.00	24.70	2292.53	-47.23	113.90	52.39	615415.70	595877.39	0.00	
2400.00	8.00	24.70	2391.56	-52.47	126.55	58.20	615428.35	595883.20	0.00	
2500.00	8.00	24.70	2490.59	-57.72	139.20	64.02	615441.00	595889.02	0.00	
2600.00	8.00	24.70	2589.61	-62.96	151.85	69.84	615453.65	595894.84	0.00	
2700.00	8.00	24.70	2688.64	-68.21	164.50	75.66	615466.30	595900.66	0.00	
2800.00	8.00	24.70	2787.66	-73.45	177.15	81.47	615478.95	595906.47	0.00	
2900.00	8.00	24.70	2886.69	-78.69	189.80	87.29	615491.60	595912.29	0.00	
3000.00	8.00	24.70	2985.72	-83.94	202.44	93.11	615504.24	595918.11	0.00	
3100.00	8.00	24.70	3084.74	-89.18	215.09	98.93	615516.89	595923.93	0.00	
3200.00	8.00	24.70	3183.77	-94.43	227.74	104.75	615529.54	595929.75	0.00	

5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
3267.69	8.00	24.70	3250.80	-97.98	236.30	108.68	615538.10	595933.68	0.00	Drop
3300.00	7.68	24.70	3282.81	-99.64	240.31	110.53	615542.11	595935.53	1.00	
3400.00	6.68	24.70	3382.02	-104.35	251.66	115.75	615553.46	595940.75	1.00	
3500.00	5.68	24.70	3481.44	-108.40	261.44	120.25	615563.24	595945.25	1.00	
3600.00	4.68	24.70	3581.03	-111.80	269.65	124.02	615571.45	595949.02	1.00	
3700.00	3.68	24.70	3680.76	-114.55	276.27	127.06	615578.07	595952.06	1.00	
3800.00	2.68	24.70	3780.61	-116.64	281.31	129.38	615583.11	595954.38	1.00	
3900.00	1.68	24.70	3880.53	-118.07	284.76	130.97	615586.56	595955.97	1.00	
4000.00	0.68	24.70	3980.51	-118.85	286.63	131.83	615588.43	595956.83	1.00	
4067.99	0.00	0.00	4048.50	-119.00	287.00	132.00	615588.80	595957.00	1.00	Hold
4100.00	0.00	0.00	4080.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4200.00	0.00	0.00	4180.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4300.00	0.00	0.00	4280.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4400.00	0.00	0.00	4380.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4500.00	0.00	0.00	4480.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4600.00	0.00	0.00	4580.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4700.00	0.00	0.00	4680.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4800.00	0.00	0.00	4780.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
4900.00	0.00	0.00	4880.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5000.00	0.00	0.00	4980.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5100.00	0.00	0.00	5080.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5200.00	0.00	0.00	5180.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5300.00	0.00	0.00	5280.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5400.00	0.00	0.00	5380.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5500.00	0.00	0.00	5480.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5600.00	0.00	0.00	5580.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5700.00	0.00	0.00	5680.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5800.00	0.00	0.00	5780.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
5900.00	0.00	0.00	5880.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6000.00	0.00	0.00	5980.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6100.00	0.00	0.00	6080.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6200.00	0.00	0.00	6180.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6300.00	0.00	0.00	6280.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6400.00	0.00	0.00	6380.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6500.00	0.00	0.00	6480.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6600.00	0.00	0.00	6580.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6700.00	0.00	0.00	6680.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6800.00	0.00	0.00	6780.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6900.00	0.00	0.00	6880.51	-119.00	287.00	132.00	615588.80	595957.00	0.00	
6969.99	0.00	0.00	6950.50	-119.00	287.00	132.00	615588.80	595957.00	0.00	KOP
7000.00	3.60	269.26	6980.49	-118.06	286.99	131.06	615588.79	595956.06	12.00	
7100.00	15.60	269.26	7078.91	-101.44	286.77	114.41	615588.57	595939.41	12.00	
7200.00	27.60	269.26	7171.72	-64.75	286.30	77.67	615588.10	595902.67	12.00	
7300.00	39.60	269.26	7254.85	-9.60	285.59	22.43	615587.39	595847.43	12.00	
7400.00	51.60	269.26	7324.69	61.60	284.67	-48.88	615586.47	595776.12	12.00	
7500.00	63.60	269.26	7378.17	145.74	283.58	-133.15	615585.38	595691.85	12.00	
7600.00	75.60	269.26	7412.97	239.14	282.38	-226.70	615584.18	595598.30	12.00	
7700.00	87.60	269.26	7427.55	337.72	281.10	-325.44	615582.90	595499.56	12.00	
7730.59	91.27	269.26	7427.85	368.25	280.71	-356.02	615582.51	595468.98	12.00	LP
7800.00	91.27	269.26	7426.31	437.53	279.82	-425.41	615581.62	595399.59	0.00	
7900.00	91.27	269.26	7424.09	537.34	278.53	-525.38	615580.33	595299.62	0.00	
8000.00	91.27	269.26	7421.87	637.15	277.24	-625.34	615579.04	595199.66	0.00	
8100.00	91.27	269.26	7419.65	736.96	275.95	-725.31	615577.75	595099.69	0.00	
8200.00	91.27	269.26	7417.43	836.76	274.66	-825.28	615576.46	594999.72	0.00	
8300.00	91.27	269.26	7415.21	936.57	273.37	-925.25	615575.17	594899.75	0.00	
8399.62	91.27	269.26	7413.00	1036.00	272.09	-1024.83	615573.89	594800.17	0.00	T1/Build
8400.00	91.28	269.26	7412.99	1036.38	272.09	-1025.21	615573.89	594799.79	2.00	
8500.00	93.28	269.26	7409.01	1136.13	270.80	-1125.12	615572.60	594699.88	2.00	
8600.00	95.28	269.26	7401.55	1235.68	269.51	-1224.83	615571.31	594600.17	2.00	

5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
8644.96	96.18	269.26	7397.07	1280.34	268.94	-1269.55	615570.74	594555.45	2.00	Hold
8700.00	96.18	269.26	7391.14	1334.97	268.23	-1324.27	615570.03	594500.73	0.00	
8800.00	96.18	269.26	7380.38	1434.22	266.95	-1423.69	615568.75	594401.31	0.00	
8814.49	96.18	269.26	7378.82	1448.60	266.76	-1438.09	615568.56	594386.91	0.00	Drop
8900.00	94.47	269.26	7370.89	1533.60	265.67	-1523.22	615567.47	594301.78	2.00	
9000.00	92.47	269.26	7364.84	1633.25	264.38	-1623.02	615566.18	594201.98	2.00	
9054.87	91.37	269.26	7363.00	1688.00	263.68	-1677.86	615565.48	594147.14	2.00	T2
9100.00	91.37	269.26	7361.92	1733.04	263.10	-1722.97	615564.90	594102.03	0.00	
9200.00	91.37	269.26	7359.53	1832.84	261.82	-1822.94	615563.62	594002.06	0.00	
9300.00	91.37	269.26	7357.14	1932.65	260.53	-1922.90	615562.33	593902.10	0.00	
9400.00	91.37	269.26	7354.74	2032.45	259.25	-2022.86	615561.05	593802.14	0.00	
9500.00	91.37	269.26	7352.35	2132.26	257.97	-2122.82	615559.77	593702.18	0.00	
9600.00	91.37	269.26	7349.96	2232.06	256.68	-2222.79	615558.48	593602.21	0.00	
9700.00	91.37	269.26	7347.57	2331.87	255.40	-2322.75	615557.20	593502.25	0.00	
9800.00	91.37	269.26	7345.18	2431.67	254.11	-2422.71	615555.91	593402.29	0.00	
9900.00	91.37	269.26	7342.78	2531.48	252.83	-2522.68	615554.63	593302.32	0.00	
10000.00	91.37	269.26	7340.39	2631.28	251.55	-2622.64	615553.35	593202.36	0.00	
10100.00	91.37	269.26	7338.00	2731.09	250.26	-2722.60	615552.06	593102.40	0.00	
10200.00	91.37	269.26	7335.61	2830.89	248.98	-2822.57	615550.78	593002.43	0.00	
10280.56	91.37	269.26	7333.68	2911.29	247.94	-2903.10	615549.74	592921.90	0.00	Drop
10300.00	90.98	269.26	7333.28	2930.70	247.69	-2922.53	615549.49	592902.47	2.00	
10377.43	89.43	269.26	7333.00	3007.99	246.70	-2999.95	615548.50	592825.05	2.00	T3
10400.00	89.43	269.26	7333.22	3030.53	246.41	-3022.52	615548.21	592802.48	0.00	
10500.00	89.43	269.26	7334.21	3130.36	245.13	-3122.51	615546.93	592702.49	0.00	
10600.00	89.43	269.26	7335.20	3230.19	243.84	-3222.49	615545.64	592602.51	0.00	
10700.00	89.43	269.26	7336.19	3330.01	242.56	-3322.48	615544.36	592502.52	0.00	
10800.00	89.43	269.26	7337.18	3429.84	241.27	-3422.47	615543.07	592402.53	0.00	
10900.00	89.43	269.26	7338.17	3529.67	239.99	-3522.45	615541.79	592302.55	0.00	
11000.00	89.43	269.26	7339.16	3629.50	238.71	-3622.44	615540.51	592202.56	0.00	
11100.00	89.43	269.26	7340.15	3729.33	237.42	-3722.43	615539.22	592102.57	0.00	
11124.47	89.43	269.26	7340.39	3753.75	237.11	-3746.89	615538.91	592078.11	0.00	Build
11200.00	90.94	269.26	7340.14	3829.16	236.14	-3822.41	615537.94	592002.59	2.00	
11300.00	92.94	269.26	7336.75	3928.93	234.85	-3922.34	615536.65	591902.66	2.00	
11346.23	93.87	269.26	7334.00	3975.00	234.26	-3968.49	615536.06	591856.51	2.00	T4
11400.00	93.87	269.26	7330.37	4028.56	233.57	-4022.13	615535.37	591802.87	0.00	
11500.00	93.87	269.26	7323.63	4128.16	232.29	-4121.89	615534.09	591703.11	0.00	
11600.00	93.87	269.26	7316.88	4227.77	231.00	-4221.66	615532.80	591603.34	0.00	
11700.00	93.87	269.26	7310.13	4327.38	229.72	-4321.42	615531.52	591503.58	0.00	
11800.00	93.87	269.26	7303.38	4426.98	228.43	-4421.19	615530.23	591403.81	0.00	
11900.00	93.87	269.26	7296.64	4526.59	227.15	-4520.95	615528.95	591304.05	0.00	
12000.00	93.87	269.26	7289.89	4626.19	225.87	-4620.71	615527.67	591204.29	0.00	
12100.00	93.87	269.26	7283.14	4725.80	224.58	-4720.48	615526.38	591104.52	0.00	
12200.00	93.87	269.26	7276.40	4825.41	223.30	-4820.24	615525.10	591004.76	0.00	
12300.00	93.87	269.26	7269.65	4925.01	222.01	-4920.01	615523.81	590904.99	0.00	
12324.45	93.87	269.26	7268.00	4949.37	221.70	-4944.40	615523.50	590880.60	0.00	PBHL 243H

**5D Anti-Collision Report****Apache Corporation****Field Name:** *Apache NM (Nad 83 NMEZ)***Site Name:** *Palmillo 3 State Com (356,244,243,354) Pad***Well Name:** *Palmillo 3 State Com 243H*

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**Weatherford®**

5D Anti-Collision Report

Anti-Collision Analysis Criteria			
Primary Well		Palmillo 3 State Com 243H (p)	
Depth Range	0.00 - 12324.45 US ft	Analysis Interval	100.00US ft
Orientation of Ellipsoid dimensions	Wellbore (High Side, Lateral, Along Hole)	AC Filter Info:	Separation Factor: 5
Separation Factor Method	STANDARD	Uncertainties computed at	2σ
Analysis Method	Vector Separation	Ellipsoid Combination Method	Independent
Surface uncertainty	Not Applied		
Secondary Well Names:		MILLMAN 3 STATE #001 (s), STATE AI 001 (s), Palmillo 3 State Com 356H (p), Palmillo 3 State Com 244H (p), Palmillo 3 State Com 354H (p)	

Report Terminology	
Ellipsoid Parameters	
TVD Spread:	Dimension in the TVD Direction.
Ellipse Parameters	
S.Minor, S.Major:	Dimensions of the bounding ellipse in the High Side, Lateral plane.
PHI:	Angle between HS and S.Minor axes.
AC Parameters	
ES:	Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr.
CC:	3D closest approach distance from a point on the primary well to the secondary well.
T.Face to Sec:	Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells.

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	0.00	12324.45	Default Tool

Wellpath created using minimum curvature.

Anti-Collision Summary (TVD relative to Drill Floor)								
SF								
Secondary Well Name	Pri MD (US ft)	Pri TVD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	ES (US ft)	CC (US ft)	SF	Risk
STATE AI 001 (s)	8850.78	7375.14	7524.14	7375.14	-26.91	147.76	0.85	SF(Hi)
MILLMAN 3 STATE #001 (s)	10089.06	7338.26	7364.26	7338.26	-23.35	181.28	0.89	SF(Hi)
Palmillo 3 State Com 244H (p)	1719.73	1717.83	1715.72	1717.02	7.98	18.46	1.76	SF(Lo); CC (Med)
Palmillo 3 State Com 354H (p)	7068.55	7048.37	7062.27	7048.37	55.93	97.26	2.35	SF(Lo)
Palmillo 3 State Com 356H (p)	1897.07	1893.53	1886.54	1884.00	56.29	67.63	5.96	
CC								
Secondary Well Name	Pri MD (US ft)	Pri TVD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	ES (US ft)	CC (US ft)	SF	Risk
Palmillo 3 State Com 244H (p)	1639.06	1637.74	1635.28	1636.86	8.03	18.02	1.80	SF(Lo); CC (Med)
Palmillo 3 State Com 354H (p)	0.00	-0.00	0.00	-0.00	29.27	30.00	41.14	
Palmillo 3 State Com 356H (p)	50.00	50.00	49.00	50.00	59.13	60.00	68.55	
STATE AI 001 (s)	8843.75	7375.82	7524.82	7375.82	-26.38	147.59	0.85	SF(Hi)
MILLMAN 3 STATE #001 (s)	10094.53	7338.13	7364.13	7338.13	-22.59	181.20	0.89	SF(Hi)

5D Anti-Collision Report

Range Summary											
Secondary Well Name: MILLMAN 3 STATE #001 (s)											
SF											
Start MD (US ft)			End MD (US ft)			Risk					
9800.00			9900.00			SF (Lo)					
10000.00			10000.00			SF (Med)					
10100.00			10100.00			SF (Hi)					
10200.00			10200.00			SF (Med)					
10300.00			10400.00			SF (Lo)					
Secondary Well Name: STATE AI 001 (s)											
SF											
Start MD (US ft)			End MD (US ft)			Risk					
8600.00			8600.00			SF (Lo)					
8700.00			8700.00			SF (Med)					
8800.00			8900.00			SF (Hi)					
9000.00			9000.00			SF (Med)					
9100.00			9100.00			SF (Lo)					
Secondary Well Name: Palmillo 3 State Com 244H (p)											
SF											
Start MD (US ft)			End MD (US ft)			Risk			CC		
1400.00			2200.00			SF (Lo)					

5D Anti-Collision Report

Primary Well: Palmillo 3 State Com 243H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Inc (°)	Az (°)	Pri TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Nearest Well	Risk
2400.00	8.00	24.70	2391.56	5.77	5.33	272.21	25.74	40.63	2.73	Palmillo 3 State Com 244H (p)	
2500.00	8.00	24.70	2490.58	6.08	5.57	273.67	28.94	44.49	2.86	Palmillo 3 State Com 244H (p)	
2600.00	8.00	24.70	2589.61	6.39	5.81	274.89	32.16	48.38	2.98	Palmillo 3 State Com 244H (p)	
2700.00	8.00	24.70	2688.64	6.70	6.05	275.93	35.40	52.29	3.10	Palmillo 3 State Com 244H (p)	
2800.00	8.00	24.70	2787.66	7.01	6.29	276.82	38.65	56.22	3.20	Palmillo 3 State Com 244H (p)	
2800.00	8.00	24.70	2787.66	7.01	6.29	146.32	38.77	55.87	3.27	Palmillo 3 State Com 354H (p)	
2900.00	8.00	24.70	2886.69	7.33	6.53	146.27	40.37	58.09	3.28	Palmillo 3 State Com 354H (p)	
3000.00	8.00	24.70	2985.72	7.65	6.77	146.21	41.96	60.32	3.29	Palmillo 3 State Com 354H (p)	
3100.00	8.00	24.70	3084.74	7.96	7.01	146.17	43.56	62.54	3.29	Palmillo 3 State Com 354H (p)	
3200.00	8.00	24.70	3183.77	8.28	7.25	146.63	45.84	65.47	3.33	Palmillo 3 State Com 354H (p)	
3300.00	7.68	24.70	3282.81	8.59	7.48	147.91	49.44	69.69	3.44	Palmillo 3 State Com 354H (p)	
3400.00	6.68	24.70	3382.02	8.84	7.67	149.33	53.38	74.16	3.57	Palmillo 3 State Com 354H (p)	
3500.00	5.68	24.70	3481.44	9.08	7.86	150.68	57.27	78.56	3.69	Palmillo 3 State Com 354H (p)	
3600.00	4.68	24.70	3581.03	9.31	8.05	151.99	61.11	82.88	3.81	Palmillo 3 State Com 354H (p)	
3700.00	3.68	24.70	3680.76	9.52	8.23	153.27	64.91	87.13	3.92	Palmillo 3 State Com 354H (p)	
3800.00	2.68	24.70	3780.61	9.72	8.41	154.51	68.67	91.32	4.03	Palmillo 3 State Com 354H (p)	
3900.00	1.68	24.70	3880.53	9.91	8.59	155.52	71.61	94.76	4.09	Palmillo 3 State Com 354H (p)	
4000.00	0.68	24.70	3980.51	10.08	8.76	156.03	72.96	96.64	4.08	Palmillo 3 State Com 354H (p)	
4100.00	0.00	0.00	4080.51	10.25	8.94	180.83	72.79	97.01	4.01	Palmillo 3 State Com 354H (p)	
4200.00	0.00	0.00	4180.51	10.44	9.15	180.83	72.22	97.01	3.91	Palmillo 3 State Com 354H (p)	
4300.00	0.00	0.00	4280.51	10.62	9.37	180.83	71.65	97.01	3.83	Palmillo 3 State Com 354H (p)	
4400.00	0.00	0.00	4380.51	10.81	9.58	180.83	71.08	97.01	3.74	Palmillo 3 State Com 354H (p)	
4500.00	0.00	0.00	4480.51	11.00	9.80	180.83	70.51	97.01	3.66	Palmillo 3 State Com 354H (p)	
4600.00	0.00	0.00	4580.51	11.20	10.02	180.83	69.94	97.01	3.58	Palmillo 3 State Com 354H (p)	
4700.00	0.00	0.00	4680.51	11.39	10.23	180.83	69.37	97.01	3.51	Palmillo 3 State Com 354H (p)	
4800.00	0.00	0.00	4780.51	11.58	10.45	180.83	68.79	97.01	3.44	Palmillo 3 State Com 354H (p)	

5D Anti-Collision Report

Primary Well: Palmillo 3 State Com 243H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Inc (°)	Az (°)	Pri TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Nearest Well	Risk
4900.00	0.00	0.00	4880.51	11.78	10.67	180.83	68.22	97.01	3.37	Palmillo 3 State Com 354H (p)	
5000.00	0.00	0.00	4980.51	11.98	10.88	180.83	67.65	97.01	3.30	Palmillo 3 State Com 354H (p)	
5100.00	0.00	0.00	5080.51	12.17	11.10	180.83	67.07	97.01	3.24	Palmillo 3 State Com 354H (p)	
5200.00	0.00	0.00	5180.51	12.37	11.32	180.83	66.50	97.01	3.18	Palmillo 3 State Com 354H (p)	
5300.00	0.00	0.00	5280.51	12.57	11.54	180.83	65.92	97.01	3.12	Palmillo 3 State Com 354H (p)	
5400.00	0.00	0.00	5380.51	12.77	11.75	180.83	65.35	97.01	3.06	Palmillo 3 State Com 354H (p)	
5500.00	0.00	0.00	5480.51	12.97	11.97	180.83	64.77	97.01	3.01	Palmillo 3 State Com 354H (p)	
5600.00	0.00	0.00	5580.51	13.17	12.19	180.83	64.20	97.01	2.96	Palmillo 3 State Com 354H (p)	
5700.00	0.00	0.00	5680.51	13.38	12.41	180.83	63.62	97.01	2.91	Palmillo 3 State Com 354H (p)	
5800.00	0.00	0.00	5780.51	13.58	12.63	180.83	63.04	97.01	2.86	Palmillo 3 State Com 354H (p)	
5900.00	0.00	0.00	5880.51	13.78	12.85	180.83	62.47	97.01	2.81	Palmillo 3 State Com 354H (p)	
6000.00	0.00	0.00	5980.51	13.99	13.07	180.83	61.89	97.01	2.76	Palmillo 3 State Com 354H (p)	
6100.00	0.00	0.00	6080.51	14.19	13.29	180.83	61.31	97.01	2.72	Palmillo 3 State Com 354H (p)	
6200.00	0.00	0.00	6180.51	14.40	13.51	180.83	60.73	97.01	2.67	Palmillo 3 State Com 354H (p)	
6300.00	0.00	0.00	6280.51	14.60	13.73	180.83	60.16	97.01	2.63	Palmillo 3 State Com 354H (p)	
6400.00	0.00	0.00	6380.51	14.81	13.95	180.83	59.58	97.01	2.59	Palmillo 3 State Com 354H (p)	
6500.00	0.00	0.00	6480.51	15.02	14.17	180.83	59.00	97.01	2.55	Palmillo 3 State Com 354H (p)	
6600.00	0.00	0.00	6580.51	15.23	14.39	180.83	58.42	97.01	2.51	Palmillo 3 State Com 354H (p)	
6700.00	0.00	0.00	6680.51	15.43	14.61	180.83	57.84	97.01	2.48	Palmillo 3 State Com 354H (p)	SF(Lo)
6800.00	0.00	0.00	6780.51	15.64	14.83	180.83	57.26	97.01	2.44	Palmillo 3 State Com 354H (p)	SF(Lo)
6900.00	0.00	0.00	6880.51	15.85	15.05	180.83	56.69	97.01	2.41	Palmillo 3 State Com 354H (p)	SF(Lo)
7000.00	3.60	269.26	6980.49	16.04	15.25	271.01	56.08	96.99	2.37	Palmillo 3 State Com 354H (p)	SF(Lo)
7068.55	11.83	269.26	7048.37	15.99	15.29	265.68	55.93	97.26	2.35	Palmillo 3 State Com 354H (p)	SF(Lo)
7100.00	15.60	269.26	7078.91	15.94	15.27	261.56	56.57	98.12	2.36	Palmillo 3 State Com 354H (p)	SF(Lo)
7200.00	27.60	269.26	7171.72	15.83	14.81	244.72	67.63	109.89	2.60		

5D Anti-Collision Report

Primary Well: Palmillo 3 State Com 243H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Inc (°)	Az (°)	Pri TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Nearest Well	Risk
7300.00	39.60	269.26	7254.85	15.94	13.80	229.65	101.52	144.35	3.37	Palmillo 3 State Com 354H (p)	
7400.00	51.60	269.26	7324.69	16.24	12.52	221.21	159.70	202.92	4.70	Palmillo 3 State Com 354H (p)	
8200.00	91.27	269.26	7417.43	28.51	11.46	N/A	510.95	658.66	4.46	Palmillo 3 State Com 354H (p)	
8300.00	91.27	269.26	7415.21	30.80	11.89	N/A	413.90	561.68	3.80	STATE AI 001 (s)	
8400.00	91.28	269.26	7412.99	33.17	12.36	N/A	318.04	465.96	3.15	STATE AI 001 (s)	
8500.00	93.28	269.26	7409.01	35.59	12.86	N/A	224.32	372.53	2.51	STATE AI 001 (s)	
8600.00	95.28	269.26	7401.55	38.05	13.39	N/A	134.78	283.74	1.90	STATE AI 001 (s)	SF(Lo)
8700.00	96.18	269.26	7391.14	40.54	13.92	N/A	53.91	205.42	1.36	STATE AI 001 (s)	SF(Med)
8800.00	96.18	269.26	7380.38	43.06	14.46	N/A	-9.69	153.86	0.94	STATE AI 001 (s)	SF(Hi)
8850.78	95.45	269.26	7375.14	44.35	14.73	N/A	-26.91	147.76	0.85	STATE AI 001 (s)	SF(Hi)
8900.00	94.47	269.26	7370.89	45.60	14.99	N/A	-8.80	157.89	0.95	STATE AI 001 (s)	SF(Hi)
9000.00	92.47	269.26	7364.84	48.17	15.54	N/A	61.70	214.68	1.40	STATE AI 001 (s)	SF(Med)
9100.00	91.37	269.26	7361.92	50.77	16.12	N/A	145.82	295.37	1.98	STATE AI 001 (s)	SF(Lo)
9200.00	91.37	269.26	7359.53	53.38	16.72	N/A	236.89	385.22	2.60	STATE AI 001 (s)	
9300.00	91.37	269.26	7357.14	56.01	17.33	N/A	331.35	479.09	3.24	STATE AI 001 (s)	
9400.00	91.37	269.26	7354.74	58.66	17.95	N/A	427.61	575.03	3.90	STATE AI 001 (s)	
9500.00	91.37	269.26	7352.35	61.31	18.58	N/A	475.89	621.35	4.27	MILLMAN 3 STATE #001 (s)	
9600.00	91.37	269.26	7349.96	63.97	19.22	N/A	380.75	526.53	3.61	MILLMAN 3 STATE #001 (s)	
9700.00	91.37	269.26	7347.57	66.64	19.86	N/A	287.66	434.03	2.97	MILLMAN 3 STATE #001 (s)	
9800.00	91.37	269.26	7345.18	69.31	20.51	N/A	198.09	345.72	2.34	MILLMAN 3 STATE #001 (s)	SF(Lo)
9900.00	91.37	269.26	7342.78	72.00	21.17	N/A	114.96	265.79	1.76	MILLMAN 3 STATE #001 (s)	SF(Lo)
10000.00	91.37	269.26	7340.39	74.68	21.83	N/A	41.34	204.35	1.25	MILLMAN 3 STATE #001 (s)	SF(Med)
10089.06	91.37	269.26	7338.26	77.08	22.42	N/A	-23.35	181.28	0.89	MILLMAN 3 STATE #001 (s)	SF(Hi)
10100.00	91.37	269.26	7338.00	77.38	22.49	N/A	-20.41	181.28	0.90	MILLMAN 3 STATE #001 (s)	SF(Hi)
10200.00	91.37	269.26	7335.61	80.07	23.16	N/A	52.17	209.65	1.33	MILLMAN 3 STATE #001 (s)	SF(Med)
10300.00	90.98	269.26	7333.28	82.77	23.83	N/A	124.90	273.92	1.84	MILLMAN 3 STATE #001 (s)	SF(Lo)
10400.00	89.43	269.26	7333.22	85.47	24.48	N/A	208.49	355.13	2.42	MILLMAN 3 STATE #001 (s)	SF(Lo)
10500.00	89.43	269.26	7334.21	88.18	25.16	N/A	298.34	444.07	3.05	MILLMAN 3 STATE #001 (s)	

5D Anti-Collision Report

Primary Well: Palmillo 3 State Com 243H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)											
Pri MD (US ft)	Inc (°)	Az (°)	Pri TVD (US ft)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Nearest Well	Risk
10600.00	89.43	269.26	7335.20	90.89	25.84	N/A	391.61	536.92	3.70	MILLMAN 3 STATE #001 (s)	
10700.00	89.43	269.26	7336.19	93.61	26.52	N/A	486.85	631.95	4.36	MILLMAN 3 STATE #001 (s)	

Secondary Well: MILLMAN 3 STATE #001 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)												
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk
9400.00	7380.74	7354.74	7354.74	0.00	N/A	127.14	127.14	N/A	572.30	717.57	4.94	
9500.00	7378.35	7352.35	7352.35	0.00	N/A	127.10	127.10	N/A	475.89	621.35	4.27	
9600.00	7375.96	7349.96	7349.96	0.00	N/A	127.06	127.06	N/A	380.75	526.53	3.61	
9700.00	7373.57	7347.57	7347.57	0.00	N/A	127.02	127.02	N/A	287.66	434.03	2.97	
9800.00	7371.18	7345.18	7345.18	0.00	N/A	126.97	126.97	N/A	198.09	345.72	2.34	SF(Lo)
9900.00	7368.78	7342.78	7342.78	0.00	N/A	126.93	126.93	N/A	114.96	265.79	1.76	SF(Lo)
10000.00	7366.39	7340.39	7340.39	0.00	N/A	126.89	126.89	N/A	41.34	204.35	1.25	SF(Med)
10089.06	7364.26	7338.26	7338.26	0.00	N/A	126.85	126.85	N/A	-23.35	181.28	0.89	SF(Hi)
10100.00	7364.00	7338.00	7338.00	0.00	N/A	126.85	126.85	N/A	-20.41	181.28	0.90	SF(Hi)
10200.00	7361.61	7335.61	7335.61	0.00	N/A	126.81	126.81	N/A	52.17	209.65	1.33	SF(Med)
10300.00	7359.28	7333.28	7333.28	0.00	N/A	126.77	126.77	N/A	124.90	273.92	1.84	SF(Lo)
10400.00	7359.22	7333.22	7333.22	0.00	N/A	126.77	126.77	N/A	208.49	355.13	2.42	SF(Lo)
10500.00	7360.21	7334.21	7334.21	0.00	N/A	126.78	126.78	N/A	298.34	444.07	3.05	
10600.00	7361.20	7335.20	7335.20	0.00	N/A	126.80	126.80	N/A	391.61	536.92	3.70	
10700.00	7362.19	7336.19	7336.19	0.00	N/A	126.82	126.82	N/A	486.85	631.95	4.36	

Secondary Well: STATE AI 001 (s)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)												
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk
8200.00	7566.43	7417.43	7417.43	0.00	N/A	130.37	130.37	N/A	510.95	658.66	4.46	
8300.00	7564.21	7415.21	7415.21	0.00	N/A	130.33	130.33	N/A	413.90	561.68	3.80	
8400.00	7561.99	7412.99	7412.99	0.00	N/A	130.29	130.29	N/A	318.04	465.96	3.15	
8500.00	7558.01	7409.01	7409.01	0.00	N/A	130.22	130.22	N/A	224.32	372.53	2.51	
8600.00	7550.55	7401.55	7401.55	0.00	N/A	130.09	130.09	N/A	134.78	283.74	1.90	SF(Lo)
8700.00	7540.14	7391.14	7391.14	0.00	N/A	129.91	129.91	N/A	53.91	205.42	1.36	SF(Med)
8800.00	7529.38	7380.38	7380.38	0.00	N/A	129.72	129.72	N/A	-9.69	153.86	0.94	SF(Hi)
8850.78	7524.14	7375.14	7375.14	0.00	N/A	129.63	129.63	N/A	-26.91	147.76	0.85	SF(Hi)
8900.00	7519.89	7370.89	7370.89	0.00	N/A	129.55	129.55	N/A	-8.80	157.89	0.95	SF(Hi)
9000.00	7513.84	7364.84	7364.84	0.00	N/A	129.45	129.45	N/A	61.70	214.68	1.40	SF(Med)
9100.00	7510.92	7361.92	7361.92	0.00	N/A	129.40	129.40	N/A	145.82	295.37	1.98	SF(Lo)
9200.00	7508.53	7359.53	7359.53	0.00	N/A	129.36	129.36	N/A	236.89	385.22	2.60	
9300.00	7506.14	7357.14	7357.14	0.00	N/A	129.31	129.31	N/A	331.35	479.09	3.24	
9400.00	7503.74	7354.74	7354.74	0.00	N/A	129.27	129.27	N/A	427.61	575.03	3.90	
9500.00	7501.35	7352.35	7352.35	0.00	N/A	129.23	129.23	N/A	524.93	672.14	4.57	

Secondary Well: Palmillo 3 State Com 244H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)												
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk
1000.00	998.00	1000.00	1000.00	0.00	0.00	3.40	3.40	0.76	23.74	30.00	4.79	
1100.00	1097.99	1099.99	1099.99	0.00	0.00	3.76	3.76	335.37	22.36	29.21	4.27	CC (Lo)
1200.00	1197.96	1199.96	1199.96	0.00	0.00	4.12	4.12	333.03	19.42	26.85	3.62	CC (Lo)
1300.00	1297.48	1299.47	1299.86	0.97	10.62	4.47	4.47	328.72	15.84	23.84	2.98	CC (Lo)
1400.00	1397.05	1399.01	1399.67	1.97	10.62	4.83	4.83	322.20	12.63	21.21	2.47	SF(Lo); CC (Lo)
1500.00	1496.66	1498.53	1499.36	2.97	10.62	5.18	5.18	313.00	10.04	19.20	2.10	SF(Lo); CC (Med)
1600.00	1596.33	1598.01	1598.90	3.96	10.62	5.54	5.53	301.14	8.36	18.12	1.86	SF(Lo); CC (Med)
1700.00	1696.05	1697.43	1698.26	4.96	10.62	5.89	5.88	287.82	7.91	18.27	1.76	SF(Lo); CC (Med)
1719.73	1715.72	1717.02	1717.83	5.16	10.62	5.96	5.95	285.20	7.98	18.46	1.76	SF(Lo); CC (Med)

5D Anti-Collision Report

Secondary Well: Palmillo 3 State Com 244H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)													
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk	
1800.00	1795.80	1796.73	1797.40	5.96	10.62	6.25	6.24	275.11	8.79	19.78	1.80	SF(Lo); CC (Med)	
1900.00	1895.63	1895.92	1896.43	6.96	10.62	6.61	6.59	266.77	10.85	22.48	1.93	SF(Lo); CC (Lo)	
2000.00	1995.50	1994.95	1995.45	7.96	10.62	6.97	6.93	264.18	13.46	25.73	2.10	SF(Lo); CC (Lo)	
2100.00	2095.37	2093.73	2094.48	8.95	10.62	7.32	7.28	265.58	16.35	29.26	2.27	SF(Lo); CC (Lo)	
2200.00	2195.28	2192.41	2193.51	9.00	10.62	7.69	7.64	268.29	19.43	33.00	2.43	SF(Lo)	
2300.00	2295.20	2291.10	2292.53	9.00	10.62	8.05	8.01	270.46	22.56	36.79	2.59		
2400.00	2395.12	2389.79	2391.56	9.00	10.62	8.41	8.37	272.21	25.74	40.63	2.73		
2500.00	2495.04	2488.48	2490.58	9.00	10.62	8.78	8.74	273.67	28.94	44.49	2.86		
2600.00	2594.96	2587.17	2589.61	9.00	10.62	9.14	9.10	274.89	32.16	48.38	2.98		
2700.00	2694.88	2685.86	2688.64	9.00	10.62	9.51	9.47	275.93	35.40	52.29	3.10		
2800.00	2794.80	2784.55	2787.66	9.00	10.62	9.88	9.84	276.82	38.65	56.22	3.20		
2900.00	2894.72	2883.24	2886.69	9.00	10.62	10.24	10.21	277.60	41.91	60.15	3.30		
3000.00	2994.64	2981.92	2985.72	9.00	10.62	10.61	10.57	278.28	45.18	64.10	3.39		
3100.00	3094.56	3080.61	3084.74	9.00	10.62	10.98	10.94	278.88	48.45	68.05	3.47		
3200.00	3194.48	3179.30	3183.77	9.00	10.62	11.35	11.31	279.42	51.73	72.01	3.55		
3300.00	3294.40	3277.99	3282.81	9.00	10.62	11.72	11.68	279.95	55.05	76.00	3.63		
3400.00	3394.28	3376.65	3382.02	9.00	10.62	12.09	12.05	281.35	58.69	80.24	3.72		
3500.00	3494.11	3475.25	3481.44	9.00	10.62	12.46	12.42	283.74	62.81	84.93	3.84		
3600.00	3593.85	3573.75	3581.03	9.00	10.62	12.83	12.79	286.94	67.59	90.24	3.98		
3700.00	3693.46	3672.14	3680.76	9.00	10.62	13.20	13.16	290.73	73.27	96.42	4.16		
3800.00	3792.91	3770.37	3780.61	9.00	10.62	13.57	13.53	294.91	80.08	103.71	4.39		
3900.00	3892.19	3868.42	3880.53	9.00	10.62	13.94	13.90	299.29	88.26	112.33	4.67		
4000.00	3991.25	3966.26	3980.51	9.00	10.62	14.31	14.27	303.68	97.99	122.49	5.00		

Secondary Well: Palmillo 3 State Com 354H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)													
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk	
1000.00	1000.00	1000.00	1000.00	0.00	0.00	3.41	3.41	180.38	23.73	30.00	4.78		
1100.00	1100.45	1100.45	1099.99	1.00	30.73	3.76	3.76	155.52	23.19	30.04	4.38		
1200.00	1200.91	1200.87	1199.96	2.01	30.73	4.12	4.12	155.04	22.73	30.16	4.06		
1300.00	1301.36	1301.22	1299.86	3.01	30.73	4.48	4.48	154.25	22.35	30.36	3.79		
1400.00	1401.81	1401.48	1399.67	4.02	30.73	4.84	4.83	153.17	22.07	30.65	3.57		
1500.00	1502.25	1501.61	1499.36	5.02	30.73	5.20	5.18	151.80	21.89	31.04	3.39		
1600.00	1602.70	1601.59	1598.90	6.03	30.73	5.55	5.54	150.18	21.82	31.54	3.24		
1700.00	1703.12	1701.36	1698.26	7.00	30.73	5.91	5.89	148.33	21.87	32.16	3.12		
1800.00	1803.11	1800.60	1797.40	7.00	30.73	6.27	6.25	147.31	22.74	33.64	3.09		
1900.00	1903.09	1899.83	1896.43	7.00	30.73	6.64	6.61	147.16	24.36	35.86	3.12		
2000.00	2003.06	1999.06	1995.45	7.00	30.73	7.00	6.97	147.02	25.97	38.08	3.14		
2100.00	2103.04	2098.29	2094.48	7.00	30.73	7.36	7.33	146.90	27.58	40.31	3.17		
2200.00	2203.01	2197.52	2193.51	7.00	30.73	7.72	7.70	146.79	29.18	42.53	3.19		
2300.00	2302.99	2296.75	2292.53	7.00	30.73	8.09	8.06	146.69	30.78	44.75	3.20		
2400.00	2402.96	2395.98	2391.56	7.00	30.73	8.45	8.42	146.61	32.38	46.98	3.22		
2500.00	2502.94	2495.21	2490.58	7.00	30.73	8.82	8.79	146.53	33.98	49.20	3.23		
2600.00	2602.91	2594.44	2589.61	7.00	30.73	9.18	9.15	146.45	35.58	51.42	3.25		
2700.00	2702.89	2693.68	2688.64	7.00	30.73	9.55	9.51	146.39	37.18	53.65	3.26		
2800.00	2802.86	2792.91	2787.66	7.00	30.73	9.92	9.88	146.32	38.77	55.87	3.27		
2900.00	2902.84	2892.14	2886.69	7.00	30.73	10.28	10.24	146.27	40.37	58.09	3.28		
3000.00	3002.82	2991.37	2985.72	7.00	30.73	10.65	10.61	146.21	41.96	60.32	3.29		
3100.00	3102.76	3090.57	3084.74	6.97	30.73	11.02	10.97	146.17	43.56	62.54	3.29		
3200.00	3201.87	3189.04	3183.77	5.98	30.73	11.38	11.34	146.63	45.84	65.47	3.33		
3300.00	3300.86	3287.58	3282.81	4.99	30.73	11.74	11.70	147.91	49.44	69.69	3.44		
3400.00	3399.75	3386.17	3382.02	4.00	30.73	12.10	12.06	149.33	53.38	74.16	3.57		
3500.00	3498.57	3484.80	3481.44	3.01	30.73	12.46	12.42	150.68	57.27	78.56	3.69		
3600.00	3597.32	3583.45	3581.03	2.02	30.73	12.81	12.77	151.99	61.11	82.88	3.81		
3700.00	3695.99	3682.09	3680.76	1.03	30.73	13.16	13.11	153.27	64.91	87.13	3.92		

5D Anti-Collision Report

Secondary Well: Palmillo 3 State Com 354H (p)(TVD relative to Drill Floor)(All Azimuth Relative to GRID NORTH)												
Pri MD (US ft)	Sec MD (US ft)	Sec TVD (US ft)	Pri TVD (US ft)	Inc (°)	Az (°)	S.Major (US ft)	S.Minor (US ft)	T.Face to Sec (°)	ES (US ft)	CC (US ft)	SF	Risk
3800.00	3794.58	3780.67	3780.61	0.05	30.73	13.50	13.45	154.51	68.67	91.32	4.03	
3900.00	3894.44	3880.53	3880.53	0.00	0.00	13.86	13.80	155.52	71.61	94.76	4.09	
4000.00	3994.42	3980.51	3980.51	0.00	0.00	14.21	14.16	156.03	72.96	96.64	4.08	
4100.00	4094.42	4080.51	4080.51	0.00	0.00	14.56	14.51	180.83	72.79	97.01	4.01	
4200.00	4194.42	4180.51	4180.51	0.00	0.00	14.92	14.86	180.83	72.22	97.01	3.91	
4300.00	4294.42	4280.51	4280.51	0.00	0.00	15.27	15.22	180.83	71.65	97.01	3.83	
4400.00	4394.42	4380.51	4380.51	0.00	0.00	15.62	15.57	180.83	71.08	97.01	3.74	
4500.00	4494.42	4480.51	4480.51	0.00	0.00	15.98	15.92	180.83	70.51	97.01	3.66	
4600.00	4594.42	4580.51	4580.51	0.00	0.00	16.33	16.28	180.83	69.94	97.01	3.58	
4700.00	4694.42	4680.51	4680.51	0.00	0.00	16.69	16.63	180.83	69.37	97.01	3.51	
4800.00	4794.42	4780.51	4780.51	0.00	0.00	17.04	16.99	180.83	68.79	97.01	3.44	
4900.00	4894.42	4880.51	4880.51	0.00	0.00	17.40	17.34	180.83	68.22	97.01	3.37	
5000.00	4994.42	4980.51	4980.51	0.00	0.00	17.75	17.70	180.83	67.65	97.01	3.30	
5100.00	5094.42	5080.51	5080.51	0.00	0.00	18.11	18.05	180.83	67.07	97.01	3.24	
5200.00	5194.42	5180.51	5180.51	0.00	0.00	18.46	18.41	180.83	66.50	97.01	3.18	
5300.00	5294.42	5280.51	5280.51	0.00	0.00	18.82	18.76	180.83	65.92	97.01	3.12	
5400.00	5394.42	5380.51	5380.51	0.00	0.00	19.17	19.12	180.83	65.35	97.01	3.06	
5500.00	5494.42	5480.51	5480.51	0.00	0.00	19.53	19.47	180.83	64.77	97.01	3.01	
5600.00	5594.42	5580.51	5580.51	0.00	0.00	19.89	19.83	180.83	64.20	97.01	2.96	
5700.00	5694.42	5680.51	5680.51	0.00	0.00	20.24	20.19	180.83	63.62	97.01	2.91	
5800.00	5794.42	5780.51	5780.51	0.00	0.00	20.60	20.54	180.83	63.04	97.01	2.86	
5900.00	5894.42	5880.51	5880.51	0.00	0.00	20.95	20.90	180.83	62.47	97.01	2.81	
6000.00	5994.42	5980.51	5980.51	0.00	0.00	21.31	21.25	180.83	61.89	97.01	2.76	
6100.00	6094.42	6080.51	6080.51	0.00	0.00	21.67	21.61	180.83	61.31	97.01	2.72	
6200.00	6194.42	6180.51	6180.51	0.00	0.00	22.02	21.97	180.83	60.73	97.01	2.67	
6300.00	6294.42	6280.51	6280.51	0.00	0.00	22.38	22.32	180.83	60.16	97.01	2.63	
6400.00	6394.42	6380.51	6380.51	0.00	0.00	22.73	22.68	180.83	59.58	97.01	2.59	
6500.00	6494.42	6480.51	6480.51	0.00	0.00	23.09	23.03	180.83	59.00	97.01	2.55	
6600.00	6594.42	6580.51	6580.51	0.00	0.00	23.45	23.39	180.83	58.42	97.01	2.51	
6700.00	6694.42	6680.51	6680.51	0.00	0.00	23.80	23.75	180.83	57.84	97.01	2.48	SF(Lo)
6800.00	6794.42	6780.51	6780.51	0.00	0.00	24.16	24.10	180.83	57.26	97.01	2.44	SF(Lo)
6900.00	6894.42	6880.51	6880.51	0.00	0.00	24.52	24.46	180.83	56.69	97.01	2.41	SF(Lo)
7000.00	6994.40	6980.49	6980.49	0.00	0.00	24.87	24.82	271.01	56.08	96.99	2.37	SF(Lo)
7068.55	7062.27	7048.37	7048.37	0.00	0.00	25.12	25.06	265.68	55.93	97.26	2.35	SF(Lo)
7100.00	7092.82	7078.91	7078.91	0.00	0.00	25.23	25.17	261.56	56.57	98.12	2.36	SF(Lo)
7200.00	7185.63	7171.72	7171.72	0.00	0.00	25.56	25.50	244.72	67.63	109.89	2.60	
7300.00	7268.76	7254.85	7254.85	0.00	0.00	25.85	25.80	229.65	101.52	144.35	3.37	
7400.00	7338.60	7324.69	7324.69	0.00	0.00	26.10	26.05	221.21	159.70	202.92	4.70	