

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTCarlsbad Field Office
OCD HobbsFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018Lease/Well No.
NMLC029519B**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	8. Well Name and No. BLACK & TAN 27 FEDERAL COM 403H	
2. Name of Operator APACHE CORPORATION	Contact: SORINA FLORES E-Mail: sorina.flores@apachecorp.com	9. API Well No. 30-025-46123-00-X1
3a. Address 303 VETERANS AIRPARK LANE SUITE 3000 MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 432-818-1167	10. Field and Pool or Exploratory Area BONE SPRINGS
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 27 T20S R34E SESW 215FSL 2200FWL 32.537437 N Lat, 103.549530 W Lon		11. County or Parish, State LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

NMB000736

9/8/19: Notify BLM, Steven, of surf spud, Spud 17-1/2" surf hole, drill to 1656' TD 9/9/19. Notify BLM, left msg, of upcoming surf csg/cmt job, Run 13-3/8" 54.5# J-55 BTC surf csg to 1656', cmt w/LEAD: 800sx CI C w/4% bentonite gel, 0.4% CPT-503P (1.72yld, 13.5ppg) TAIL: 300sx CI C (1.33yld, 14.8ppg) Circ 325sx to surf, job witnessed by BLM rep, Paul Flowers, WOC 24hrs per BLM. RU Battle, Test csg 1800psi/30min - OK.

9/11/19: Drill 12-1/4" interm hole f/1656'-5720', Notify Pat McKelvy @ BLM of upcoming interm csg/cmt job.

9/16/19: Run 9-5/8" 40# HCL-80 BTC f/4754' to 5710', run 9-5/8" J-55 BTC csg f/surf - 4754', FS @

HOBBS OCD
DEC 05 2019
RECEIVED

14. I hereby certify that the foregoing is true and correct. Electronic Submission #493129 verified by the BLM Well Information System For APACHE CORPORATION, sent to the Hobbs Committed to AFMSS for processing by PRISCILLA PEREZ on 11/21/2019 (20PP0426SE)	
Name (Printed/Typed) SORINA FLORES	Title SUBMITTING CONTACT
Signature (Electronic Submission)	Date 11/20/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title Accepted for Record	Date NOV 22 2019
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Jonathon Shepard Carlsbad Field Office	
	Office _____	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #493129 that would not fit on the form

32. Additional remarks, continued

5708', FC @ 5622', ECP @ 3496', DVT @ 3493', Cmt 1st stage LEAD: 370sx CI C w/5% salt, 6% gel, 0.4% CPT-503P, 0.55% CPT-20A (1.64yld, 12.9ppg) TAIL: 300sx CI C w/0.15% CPT-24 (1.33yld, 14.8ppg), Circ 274sx of DVT, 2nd Stage LEAD: 1800sx CI C w/5% salt, 6% gel, 0.4% CPT-503P, 0.55% CPT-20A (1.64yld, 12.9ppg) TAIL: 200sx CI C w/0.15% CPT-24 (1.33yld, 14.8ppg) Circ 431sx to surf (cmt witnessed by BLM Matthew Kade), WOC 24hrs per BLM.

9/17/19: Test csg above DVT @ 1500psi/5min-Ok, test csg below DVT f/1500psi/30min-ok, drill 8-3/4" vertical hole f/5720'-10815', Notify BLM, Matthew Kade, of liner/cmt job, Run 7-5/8" 29.7# HCL-80 TMK UP SF liner f/5475'-10795'(LC @ 10700', FC @ 10744')

9/22/19: Cmt LEAD: w/265sx Nine Lite w/3% salt, 1% MgOx-M, 0.5% CPT-30, 0.15% GXT, 0.45% CPT-23(2.21yld, 11.5ppg) TAIL: 120sx CI H w/2% gel, 1% MgOx-M, 0.6% CPT-30, 0.3% D-3, 0.15% CPT-23(1.21yld, 14.5ppg) Circ 50sx to surf of top of liner, pressure test liner/csg up to 2380psi/30min-ok.

9/24/19: Drill 10' new formation f/10815-10825', drill 6-3/4" curve f/10825'-11782', drill 6-3/4" lateral f/11782-16388' TD.

10/2/19: Notify BLM, Mila Hackfort, of intent to run prod csg/cmt, run 5-1/2" 20# CYP-110 GBCD f/surf-16249', run 4-1/2" 13.5# HCP-110/CYP-110 BTC csg f/16249-16388' (XO @ 4985', MJ @ 10777', float sub @ 10797', MJ @ 15298', XO @ 16247', FC @ 16339', FS @ 16385')

10/4/19: Cmt LEAD w/1100sx CI H w/5% salt, 4% gel, 0.5% CPT-19, 1% CPT-45, 0.4% CPT-503P, 0.2% CPT-20A, 0.2% citric acid(2.03yld, 11.9ppg) TAIL: 450sx Nine Lite w/1.3% salt, 3% MgOx-H, 0.5% CPT-19, 0.2% D-3, 0.25% CPT-503P, 0.65% CPT-20A, 0.1% CPT-51A (1.46yld, 13.2ppg) Circ 255sx to surf, WOC, NU night cap, cap off test to 4000psi-OK, RR 10/4/19.



Weatherford

Drilling Services
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Apache Corporation
303 Veterans Airpark Lane
Midland, TX, 79705

Date: October 2, 2019

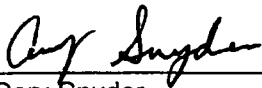
Attention: John Vacek

Re: Apache Corporation
Well: Black and Tan 27 Fed Com 403H
Lea County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

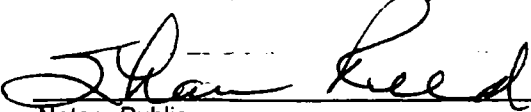
Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Cory Snyder MWD Ops. Coordinator	403H	10,879 MD 16,336 MD	9/26/2019 10/1/2019	Measurement While Drilling

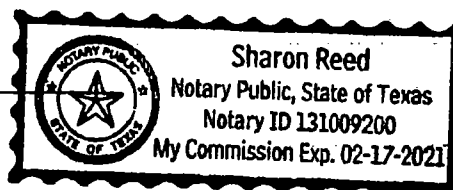
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Cory Snyder
MWD Ops. Coordinator

On this, the 2nd day of October, 2019, before me a notary public, the undersigned officer, personally appeared Cory Snyder, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public



**5D Survey Report**

Apache Corporation

Field Name: *Apache NM (Nad 83 NMEZ)*
Site Name: *Black & Tan 27 Fed Com Pad 2*
Well Name: *Black and Tan 27 Fed Com 403H*
File number: *13841005*
Survey: *Definitive survey*

2 October 2019





Black and Tan 27 Fed Com 403H

Field Name:	Map Units: US ft		Company Name: Apache Corporation	
Apache NM (Nad 83 NMEZ)	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)			
	Comment:			
Site:	Units: US ft	North Reference: Grid	Convergence Angle: 0.42	
	Position:	Northing: 560138.30 US ft	Latitude: 32.537436108	
		Easting: 782842.60 US ft	Longitude: -103.549659332	
Black & Tan 27 Fed Com Pad 2	Elevation above MSL: 3715.00 US ft			
Slot:	Comment:			
	Position (Relative to Site Centre)			
	+N/-S: 0.30 US ft	Northing: 560138.60 US ft	Latitude: 32.537436124	
	+E/-W: 40.00 US ft	Easting: 782882.60 US ft	Longitude: -103.549529536	
	Slot TVD Reference: Ground Elevation			
Black & Tan 27 Fed Com 403H	Elevation above MSL: 3717.00 US ft			
Well:	Comment:			
	Type: Main well		UWI:	
	File Number: 13841005	Comment: H&P 482		
	Closure Distance: 5025.57 US ft		Closure Azimuth: 3.03°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
Black and Tan 27 Fed Com 403H	+N/-S: -0.00 US ft	+E/-W: 0.00 US ft	Az: 359.69°	

Drill floor: Survey Name: Definitive Survey
Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3743.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Survey Name: Definitive Survey

Date: 21/Aug/2018 **Survey Tool:** See Survey Tool Ranges below. **Comment:** **Company:**

Magnetic Model:

Model Name: IFR **Date:** 05/Sep/2019 **Field Strength:** 48121.0 nT **Declination:** 6.77° **Dip:** 60.44°

Tie Point:

MD: 0.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00° **TVD:** -0.00 US ft **North Offset:** -0.00 US ft **East Offset:** 0.00 US ft

Survey Tool Ranges:

Name	Start MD(USft)	End MD(USft)	Source Survey
VES GyroFlex V3	0.00	10811.00	VES Gyro
MWD + IFR + MS	10811.00	11730.00	WFT MWD 03
MWD + IFR + Sag Corr + MS	11730.00	16388.00	WFT MWD 04

5D Survey Report

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
ID (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	H.Offset (US ft)	E.Offset (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
10811.00	1.31	189.72	10785.26	-157.69	-156.01	310.42	0.52	559982.59	783193.02	VES Gyro Tleon
10879.00	1.30	190.93	10853.25	-159.21	-157.54	310.15	0.04	559981.06	783192.75	First WFT MWD Svy
10926.00	1.17	197.58	10900.23	-160.19	-158.52	309.90	0.41	559980.08	783192.50	
10974.00	2.02	334.98	10948.23	-159.89	-158.22	309.39	6.23	559980.38	783191.99	
11021.00	9.95	358.14	10994.94	-155.07	-153.40	308.91	17.30	559985.20	783191.51	
11068.00	16.68	0.80	11040.65	-144.25	-142.59	308.87	14.37	559996.01	783191.47	
11115.00	22.65	358.73	11084.89	-128.45	-126.78	308.77	12.79	560011.82	783191.37	
11163.00	29.68	357.47	11127.94	-107.30	-105.64	308.04	14.69	560032.96	783190.64	
11210.00	35.45	356.97	11167.54	-82.04	-80.38	306.80	12.29	560058.22	783189.40	
11257.00	41.40	356.70	11204.34	-52.88	-51.23	305.19	12.66	560087.37	783187.79	
11304.00	47.18	355.06	11237.97	-20.15	-18.51	302.80	12.54	560120.09	783185.40	
11352.00	51.93	356.52	11269.10	16.28	17.91	300.14	10.16	560156.51	783182.74	
11399.00	56.63	357.67	11296.53	54.39	56.00	298.22	10.20	560194.60	783180.82	
11447.00	60.86	356.72	11321.43	95.37	96.98	296.20	8.97	560235.58	783178.80	
11494.00	64.95	356.03	11342.83	137.14	138.73	293.55	8.80	560277.33	783176.15	
11541.00	67.73	356.76	11361.69	180.11	181.69	290.85	6.08	560320.29	783173.45	
11588.00	69.69	356.82	11378.76	223.84	225.41	288.40	4.17	560364.01	783171.00	
11636.00	73.30	359.78	11393.99	269.34	270.89	287.06	9.53	560409.49	783169.66	
11683.00	77.50	1.47	11405.84	314.80	316.36	287.56	9.59	560454.96	783170.16	
11730.00	82.93	1.46	11413.82	361.08	362.64	288.75	11.55	560501.24	783171.35	
11751.00	85.49	1.04	11415.94	381.96	383.53	289.20	12.35	560522.13	783171.80	
11798.00	87.51	0.60	11418.81	428.86	430.44	289.87	4.40	560569.04	783172.47	
11845.00	89.22	1.06	11420.15	475.83	477.41	290.55	3.77	560616.01	783173.15	
11940.00	90.00	0.47	11420.80	570.81	572.40	291.82	1.03	560711.00	783174.42	
12034.00	90.13	1.93	11420.69	664.78	666.37	293.79	1.56	560804.97	783176.39	
12129.00	90.00	1.07	11420.58	759.73	761.34	296.28	0.92	560899.94	783178.88	
12223.00	90.22	1.19	11420.40	853.70	855.32	298.13	0.27	560993.92	783180.73	
12318.00	90.22	0.32	11420.04	948.68	950.31	299.38	0.92	561088.91	783181.98	
12412.00	90.76	359.34	11419.24	1042.67	1044.31	299.10	1.19	561182.91	783181.70	
12507.00	89.94	359.32	11418.66	1137.67	1139.30	297.99	0.86	561277.90	783180.59	
12601.00	91.15	0.64	11417.76	1231.66	1233.29	297.96	1.90	561371.89	783180.56	
12696.00	89.61	0.35	11417.13	1326.65	1328.28	298.78	1.65	561466.88	783181.38	
12790.00	90.50	0.70	11417.04	1420.63	1422.28	299.64	1.02	561560.88	783182.24	
12885.00	90.98	1.79	11415.81	1515.59	1517.24	301.71	1.25	561655.84	783184.31	
12979.00	90.08	1.38	11414.94	1609.53	1611.20	304.31	1.05	561749.80	783186.91	
13074.00	88.80	359.48	11415.87	1704.51	1706.19	305.02	2.41	561844.79	783187.62	
13168.00	89.55	0.22	11417.23	1798.50	1800.18	304.77	1.12	561938.78	783187.37	
13262.00	89.69	0.00	11417.85	1892.50	1894.18	304.95	0.28	562032.78	783187.55	
13357.00	89.58	0.02	11418.46	1987.49	1989.17	304.97	0.12	562127.77	783187.57	
13452.00	89.30	0.16	11419.38	2082.49	2084.17	305.12	0.33	562222.77	783187.72	
13546.00	90.50	357.59	11419.55	2176.47	2178.14	303.27	3.02	562316.74	783185.87	
13641.00	90.95	358.11	11418.35	2271.41	2273.07	299.71	0.72	562411.67	783182.31	
13736.00	89.41	358.48	11418.05	2366.38	2368.02	296.88	1.67	562506.62	783179.48	
13830.00	89.75	358.89	11418.74	2460.36	2461.99	294.73	0.57	562600.59	783177.33	
13925.00	89.86	358.40	11419.06	2555.35	2556.97	292.48	0.53	562695.57	783175.08	
14020.00	89.92	357.54	11419.24	2650.30	2651.90	289.11	0.91	562790.50	783171.71	
14114.00	89.92	356.76	11419.37	2744.21	2745.79	284.44	0.83	562884.39	783167.04	
14209.00	90.56	358.77	11418.98	2839.15	2840.71	280.74	2.22	562979.31	783163.34	
14303.00	89.72	358.62	11418.75	2933.13	2934.68	278.60	0.91	563073.28	783161.20	
14398.00	90.03	359.79	11418.95	3028.13	3029.67	277.28	1.27	563168.27	783159.88	
14492.00	90.25	359.61	11418.72	3122.13	3123.67	276.79	0.30	563262.27	783159.39	
14587.00	89.30	358.32	11419.10	3217.12	3218.65	275.07	1.69	563357.25	783157.67	
14682.00	91.04	359.00	11418.81	3312.10	3313.62	272.85	1.97	563452.22	783155.45	
14776.00	91.06	358.58	11417.09	3406.07	3407.58	270.86	0.45	563546.18	783153.46	
14871.00	92.27	359.84	11414.33	3501.02	3502.53	269.55	1.84	563641.13	783152.15	
14965.00	92.16	359.14	11410.70	3594.95	3596.46	268.72	0.75	563735.06	783151.32	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	H.Offset (US ft)	E.Offset (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
15060.00	92.80	0.49	11406.59	3689.86	3691.36	268.41	1.57	563829.96	783151.01	
15155.00	92.75	1.02	11401.99	3784.73	3786.24	269.66	0.56	563924.84	783152.26	
15249.00	91.34	0.97	11398.63	3878.64	3880.17	271.29	1.50	564018.77	783153.89	
15344.00	91.46	0.81	11396.31	3973.59	3975.13	272.77	0.21	564113.73	783155.37	
15438.00	90.36	1.09	11394.82	4067.56	4069.10	274.33	1.21	564207.70	783156.93	
15533.00	90.36	0.76	11394.22	4162.53	4164.09	275.86	0.35	564302.69	783158.46	
15627.00	90.98	0.47	11393.12	4256.51	4258.08	276.87	0.73	564396.68	783159.47	
15722.00	90.81	359.94	11391.64	4351.50	4353.06	277.21	0.59	564491.66	783159.81	
15816.00	90.22	358.74	11390.80	4445.49	4447.05	276.13	1.42	564585.65	783158.73	
15911.00	90.03	357.63	11390.59	4540.46	4542.00	273.12	1.19	564680.60	783155.72	
16005.00	91.90	359.32	11389.00	4634.41	4635.95	270.61	2.68	564774.55	783153.21	
16099.00	91.99	358.99	11385.81	4728.36	4729.88	269.23	0.36	564868.48	783151.83	
16194.00	92.89	359.64	11381.77	4823.27	4824.79	268.09	1.17	564963.39	783150.69	
16288.00	93.11	359.40	11376.85	4917.14	4918.66	267.31	0.35	565057.26	783149.91	
16336.00	92.55	359.05	11374.48	4965.08	4966.59	266.66	1.38	565105.19	783149.26	Last WFT MWD Svy
16388.00	92.55	359.05	11372.17	5017.02	5018.53	265.80	0.00	565157.13	783148.40	TD@16388' MD / PTB

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name	
⁴ Property Code		⁵ Property Name BLACK & TAN 27 FEDERAL COM			
⁷ GRID NO.		⁸ Operator Name APACHE CORPORATION			
		⁶ Well Number 403H			
		⁹ Elevation 3717'			

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
N	27	20S	34E		215	SOUTH	2200	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	27	20S	34E		50	NORTH	2501	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

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

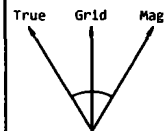
N 89°30'05" E 2643.25' N 89°30'03" E 2644.71' N 00°24'01" W 2639.57' N 00°24'06" W 2640.26' N 00°28'16" E 2643.63' S 89°33'18" W 2646.57' S 89°34'30" W 2645.64'		2501' 50' 40 Ac. 40 Ac. 40 Ac. 2200' 215' S.L. F.T.P. K.O.P.	① B.H. L.T.P. ② 27 ③	GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION (S.L.) N:560138.6 - E:782882.6 LAT:32.5374361° N LONG:103.5495297° W KICK OFF POINT (KOP) 54' FSL & 2516' FWL N:559980.1 - E:783192.5 LAT:32.5369942° N LONG:103.5485278° W MD:10926.0 - TVD:10900.2 FIRST TAKE POINT (FTP) 100' FSL & 2508' FWL N:560026.0 - E:783190.9 LAT:32.5371204° N LONG:103.5485319° W MD:11147.2 - TVD:11113.8 CORNER DATA NAD 83 GRID - NM EAST A: FOUND BRASS CAP "1912" N 559906.6 - E 780684.6 B: FOUND BRASS CAP "1912" N 562546.2 - E 780666.1 C: FOUND BRASS CAP "ILLEGIBLE" N 565185.2 - E 780647.6 D: FOUND BRASS CAP "1912" N 565208.2 - E 783290.2 E: FOUND BRASS CAP "1912" N 565231.3 - E 785934.3 F: FOUND BRASS CAP "1912" N 562589.8 - E 785953.8 G: FOUND-1/2" REBAR N 559946.7 - E 785975.6 H: FOUND BRASS CAP "1912" N 559927.1 - E 783330.5 CALCULATED POINTS 1: N 565196.7 - E 781968.9 2: N 559916.8 - E 782007.5	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____ E-mail Address _____ 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 7-2-2018 Date of Survey Signature and Seal of Professional Surveyor 10034 Certificate Number 10034 Job No.: LS1806830AB2
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Apache Corporation
Black & Tan 27 Fed Com 403H
Lea Co, New Mexico

Plan vs Actual

KB: 3743'
GL: 3717'



Grid Convergence: 0.42°
Mag Declination: 6.77°
Bearing:
True = Mag + 6.77°
Grid = True - 0.42°
Total Correction 6.35°

Plan Data for Black and Tan 27 Fed Com 403H

Field: Apache NM (Mad 83 N06E2)
Map Unit: USFT
Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / New Mexico East (ftUS)

Site: Black & Tan 27 Fed Com Pad 2
Unit: USFT
Company Name: Apache Corporation
Position: Northing: 560138.30USft Latitude: 32.537436°
Easting: 782842.60USft Longitude: -103.549559°
North Reference: Grid
Grid Convergence: 0.42°
Elevation Above VRD: 3715.00USft

Slot: Black & Tan 27 Fed Com 403H
Position:
Offset is from Site centre
+N/-S: 0.30USft Northing: 560138.60USft Latitude: 32.537436°
+E/-W: 40.00USft Easting: 782842.60USft Longitude: -103.549559°
Elevation Above VRD: 3717.00USft

Well: Black and Tan 27 Fed Com 403H
Type: Main-Well
File Number: 13841005
Plan Folder: P2
Plan: P2:V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: -0.00USft Azimuth: 359.69°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
IFR 48121(NT) 6.77° 60.44° 2019-09-05
Comment: H&P 482

Plan Data for Black and Tan 27 Fed Com 403H

Formation Point Information:
Name TVD Elevation MD
(USft) (USft) (USft)
WOLF CAMP B 11541.00 -7798.00 1.00
RUSTLER 1600.00 2135.00 1600.00
SALADO 1967.00 1776.00 1967.12
TANSILL 3240.00 403.00 3352.49
YATES 3543.00 200.00 3559.22
SEVEN RIVERS 3930.00 -196.00 3960.68
DELAWARE 5703.00 -1960.00 5728.05
AVALON 8603.00 -4860.00 8628.43
1 BSC 9520.00 -5777.00 9545.53
1 BSS 9718.00 -5975.00 9743.56
2 BSC 9959.00 -6216.00 9984.60
2 BSS 10191.00 -6448.00 10216.66
3 BSC 10741.00 -6998.00 10766.72
3 BSS 11026.00 -7283.00 11052.16
WOLF CAMP A 11356.00 -7613.00 11465.38

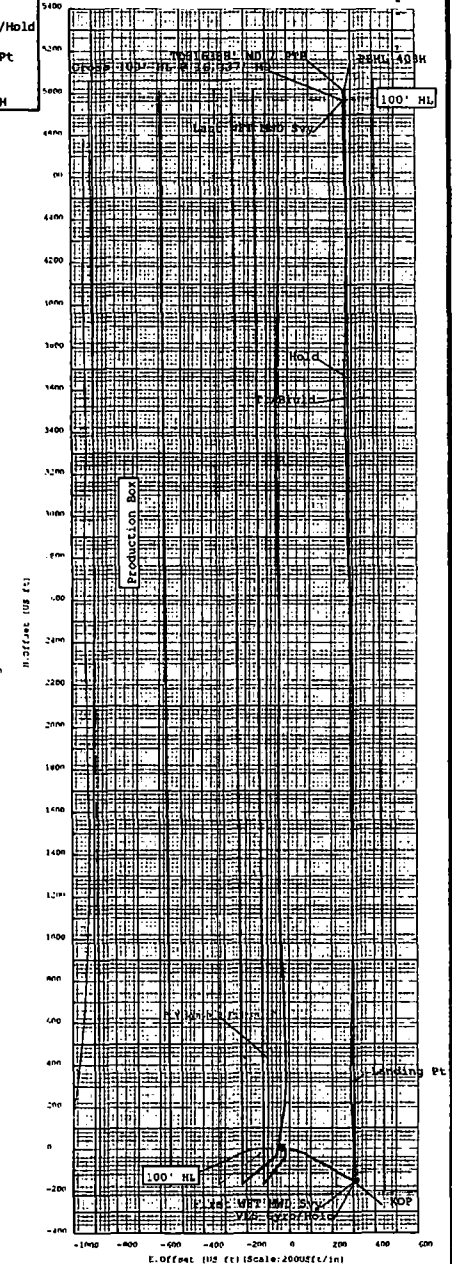
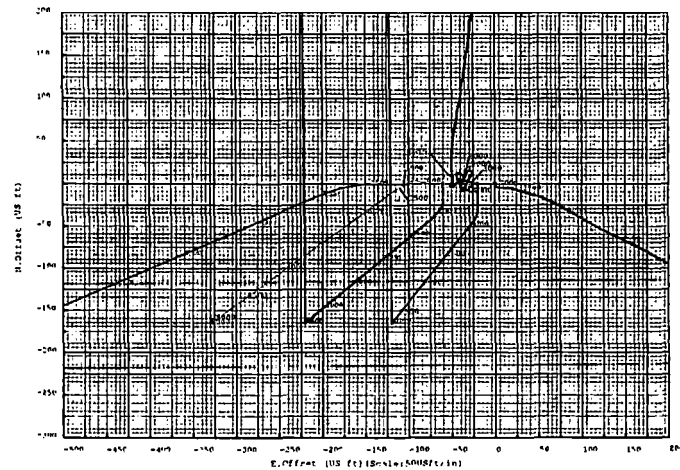
Plan Data for Black and Tan 27 Fed Com 403H

Target Set Information:
Name: B&T27FC403H
Position offsets from Slot centre
Name TVD Elevation +N/-S +E/-W Northing Easting
(USft) (USft) (USft) (USft) (USft) (USft)
KOP 10945.32 -7202.32 -162.60 308.70 559976.00 783191.30
FTP 0.00 3743.00 -112.60 308.70 560026.00 783191.30
LP 11423.00 -7680.00 318.07 305.37 560456.07 783187.97
T1 11398.00 -7655.00 3560.47 282.85 563707.07 783165.45
LTP 11343.02 -7600.02 4968.50 272.10 565107.10 783155.70
PBHL 11341.00 -7598.00 5018.50 272.80 565157.10 783155.40

Black and Tan 27 Fed Com 403H
Black & Tan 27 Fed Com 303H - Lateral
B V Lynch B Federal 2
Black & Tan 27 Fed Com 302H
Black and Tan 27 Fed Com 402H
Black and Tan 27 Fed Com 502H
Black and Tan 27 Fed Com 202H
Black & Tan 27 Fed Com 303H - Pilot
Black and Tan 27 Fed Com 102H
Black and Tan 27 Fed Com 403H

Plan Data for Black and Tan 27 Fed Com 403H

Plan Point Information:
Dogleg Severity Unit: °/100.00ft
Position offsets from Slot centre
MD Inc Az TVD +N/-S +E/-W Northing Easting VSec DLS Comments
(USft) (°) (°) (USft) (USft) (USft) (USft) (USft) (DLSU)
10811.00 1.31 189.72 10785.26 -156.01 318.42 559982.59 783193.02 -157.69 0.52 VES Gyro/Hold
10960.50 1.31 189.72 10934.72 -159.38 309.85 559979.22 783192.45 -161.06 0.00 KOP
11724.91 90.44 359.62 11422.92 321.60 304.64 560460.20 783187.24 319.95 12.00 Landing Pt
14971.95 90.44 359.62 11398.00 3568.47 282.85 563707.07 783165.45 3566.89 0.00 T1/Bivld
15065.54 92.31 359.60 11395.75 3662.02 282.21 563800.62 783164.81 3660.44 2.00 Hold
16423.15 92.31 359.60 11341.00 5018.50 272.80 565157.10 783155.40 5016.95 0.00 PBHL 403H



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