

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO.	30-025-33549
5. Indicate Type of Lease	STATE ☐ FEE ☒
6. State Oil & Gas Lease No.	14897

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER _____		7. Lease Name or Unit Agreement Name Bertha	
b. Type of Completion: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER _____		8. Well No. 5	
2. Name of Operator Arch Petroleum Inc.		9. Pool name or Wildcat Fowler Tubb, South	
3. Address of Operator 10 Desta Drive, Suite 420E, Midland, TX 79705			
4. Well Location Unit Letter M : 800 Feet From The South Line and 990 Feet From The West Line Section 23 Township 24S Range 37E NMPM Lea County			
10. Date Spudded 2/22/97	11. Date T.D. Reached 3/7/97	12. Date Compl. (Ready to Prod.) 6/6/97	13. Elevations (DF& RKB, RT, GR, etc.) 3214 GR
14. Elev. Casinghead			
15. Total Depth 6500'	16. Plug Back T.D. 6001'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools X Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name 5836' - 5935'			20. Was Directional Survey Made No
21. Type Electric and Other Logs Run GR-CPD-CNL-CL, GR-DLL-MLL			22. Was Well Cored No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	23#	1018'	12-1/4"	Lead 100 sxs cmtCl "H", Tail 150 sxs cmt cir 300 to surface	
4-1/2"	11.6#	6500'	7-7/8"	Lead 1300 sxs cmt Cl "C", Tail 530 sxs Cl "C", Did not circ.	
				TOC 2020'	

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number) 5836', 5860', 5866', 5871', 5876', 5881', 5917', 5924', 5931' & 5935'		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 5836' - 5935' 5836' - 5935' AMOUNT AND KIND MATERIAL USED 2400 gal 15% NEFE HCL 50,000 gal of 35# XL gel w/ 11500# of 100 mesh sand &	
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28. PRODUCTION		140,000 of 16/30 mesh Ottawa sand	
Date First Production 5/29/97	Production Method (Flowing, gas lift, pumping - Size and type pump) Plunger Lift		Well Status (Prod. or Shut-in) Prod
Date of Test 6/21/97	Hours Tested 24	Choke Size	Prod'n For Test Period
Flow Tubing Press. 620	Casing Pressure 500	Calculated 24-Hour Rate	Oil - Bbl. 18
			Gas - MCF 228
			Water - Bbl. 11
			Gas - Oil Ratio 12666
			Oil Gravity - API - (Corr.) 40.1

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold	Test Witnessed By
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30. List Attachments Lods & inclination report, temp. survey

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Bobbie Brooks Printed Name Bobbie Brooks Title Prod. Analyst Date 7/8/97

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

Locality	Altitude (Feet)	Locality	Altitude (Feet)	Locality	Altitude (Feet)
T. Anhy	963	T. Canyon	1095	T. Ojo Alamo	
T. Salt	1095	T. Strawn	2293	T. Kirtland-Fruitland	
B. Salt	2293	T. Atoka	2494	T. Pictured Cliffs	
T. Yates	2494	T. Miss	2698	T. Cliff House	
T. 7 Rivers	2698	T. Devonian	3272	T. Menefee	
Penrose	3272	T. Silurian	3477	T. Point Lookout	
T. Grayburg	3477	T. Montoya		T. Mancos	
T. San Andres	3712	T. Simpson		T. Gallup	
T. Glorieta	4856	T. McKee		Base Greenhorn	
T. Paddock	5152	T. Ellenburger		T. Dakota	
T. Blinberry	5152	T. Gr. Wash		T. Morrison	
T. Tubb	5796	T. Delaware Sand		T. Todillo	
T. Drinkard	5974	T. Bone Springs		T. Entrada	
T. Abo	6306			T. Wingate	
T. Wolfcamp				T. Chinle	
T. Perm				T. Permian	
T. Cisco (Bough C)				T. Perm "A"	

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet
 No. 2, from to feet
 No. 3, from to feet

LITHOLOGY RECORD (Attach additional sheet if necessary)

[illegible]

STATE OF NEW MEXICO
OIL AND GAS DIVISION

INCLINATION REPORT

FOWLER ABO POOL

BERTHA LEASE

LOCATION - 800' FSL, 990' FWL, SEC. 23, T24S, R37E

ARCH PETROLEUM INC., OPERATOR
10 DESTA DRIVE, STE. 420E
MIDLAND, TX 79705

WELL #5
Unit M
LEA COUNTY
30-025-33549

RECORD OF INCLINATION

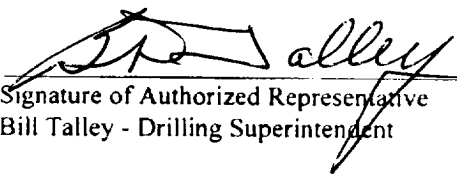
MEASURED DEPTH
FEET

ANGLE OF INCLINATION
DEGREE

256	1/4
538	3/4
765	1/4
1024	0
1682	1-1/2
2195	1-1/2
2695	1-1/4
3227	3/4
3725	3/4
4225	1
4715	1/2
5231	3/4
5688	1/2
6500	1

This information is true and correct to the best of my knowledge.

CANTEX DRILLING INC.



Signature of Authorized Representative
Bill Talley - Drilling Superintendent

BERTHA #5 ARCH PETROLEUM					
MEAS	COURSE	ANGLE	DISP	COURSE	ACCUM
DEPTH	LENGTH			DISP	DISP
256	2.56	0.25	0.436	1.12	1.12
538	2.82	0.75	1.309	3.69	4.81
738	2	0.25	0.436	0.87	5.68
1003	2.65	0	0	0.00	5.68
1024	0.21	0	0	0.00	5.68
1682	6.58	1.5	2.618	17.23	22.91
2195	5.13	1.5	2.618	13.43	36.34
2695	5	1.25	2.181	10.91	47.24
3227	5.32	0.75	1.309	6.96	54.21
3725	4.98	0.75	1.309	6.52	60.72
4225	5	1	1.745	8.73	69.45
4715	4.9	0.5	0.873	4.28	73.73
5231	5.16	0.75	1.309	6.75	80.48
5688	4.57	0.5	0.873	3.99	84.47
6500	8.12	1	1.745	14.17	98.64

Bentley
Cantex Drilling