

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
311 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

HOBBS OCD

AUG 26 2013

RECEIVED

State of New Mexico

Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-101
Revised November 14, 2012

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address CAZA OPERATING, LLC. 200 NORTH LORAIN SUITE 1550 MIDLAND, TEXAS 79701		OGRID Number 249099
Property Code 40096		API Number 30-025-41361
Property Name GRAMMA 27 STATE		Well No. 1H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
0	27	21S	34E		330'	SOUTH	1980'	EAST	LEA

*** Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
B	27	21S	34E		330'	NORTH	1980'	EAST	LEA

9. Pool Information

Pool Name	Pool Code
GRAMA RIDGE-BONE SPRING NORTHEAST	28435

Additional Well Information

11. Work Type N	12. Well Type 0	13. Cable/Rotary ROTARY	14. Lease Type S	15. Ground Level Elevation 3682'
16. Multiple NO	17. Proposed Depth MD-11,500'	18. Formation BONE SPRING	19. Contractor UNKNOWN	20. Spud Date WHEN APPROVED
Depth to Ground water 100'		Distance from nearest fresh water well Approximately 1.5 miles Northeast		Distance to nearest surface water None known

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURFACE	17 1/2"	13 3/8"	54.5#	1800'	1506 Sx.	SURFACE
INTERMED	12 1/4"	9 5/8"	40#	5700'	1332 Sx.	SURFACE
PRODUCTION	7 1/2 7/8"	5 1/2"	17#	15,515'	1748 Sx.	5500' From Sur.

Casing/Cement Program: Additional Comments

SEE ATTACHED SHEET FOR DETAIL

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DOUBLE RAM	5000 PSI	3000 PSI	CAMERON OR SCHAFFER

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: *Joe T. Janica*

Printed name: **Joe T. Janica**

Title: **Permit Eng.**

E-mail Address: **joejanica@valornet.com**

Date: **08/26/13**

Phone: **575-391-8503**

OIL CONSERVATION DIVISION

Approved By:

Title: **Petroleum Engineer**

Approved Date: **08/27/13** Expiration Date: **08/27/15**

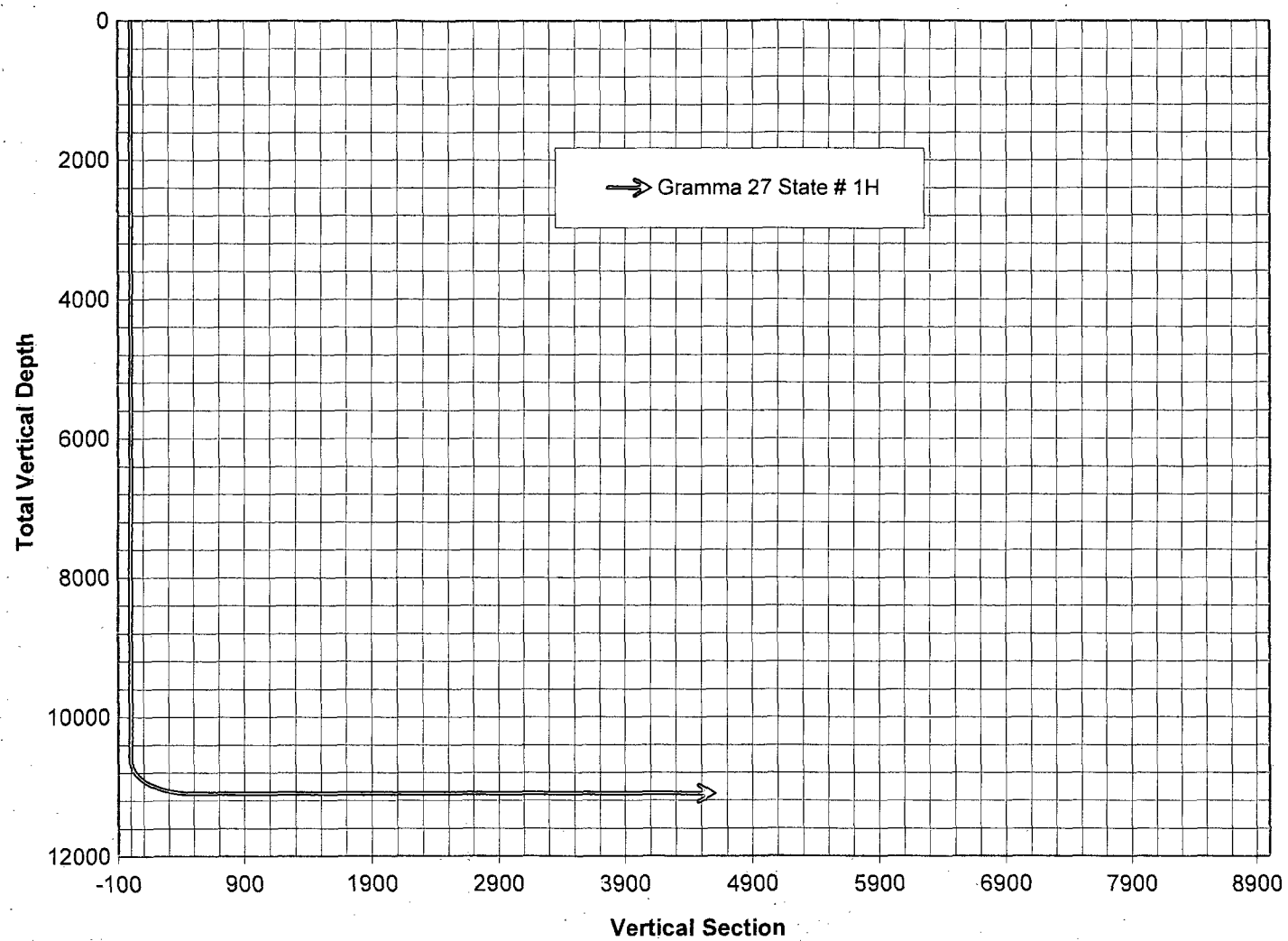
Conditions of Approval Attached

AUG 28 2013

P.M.

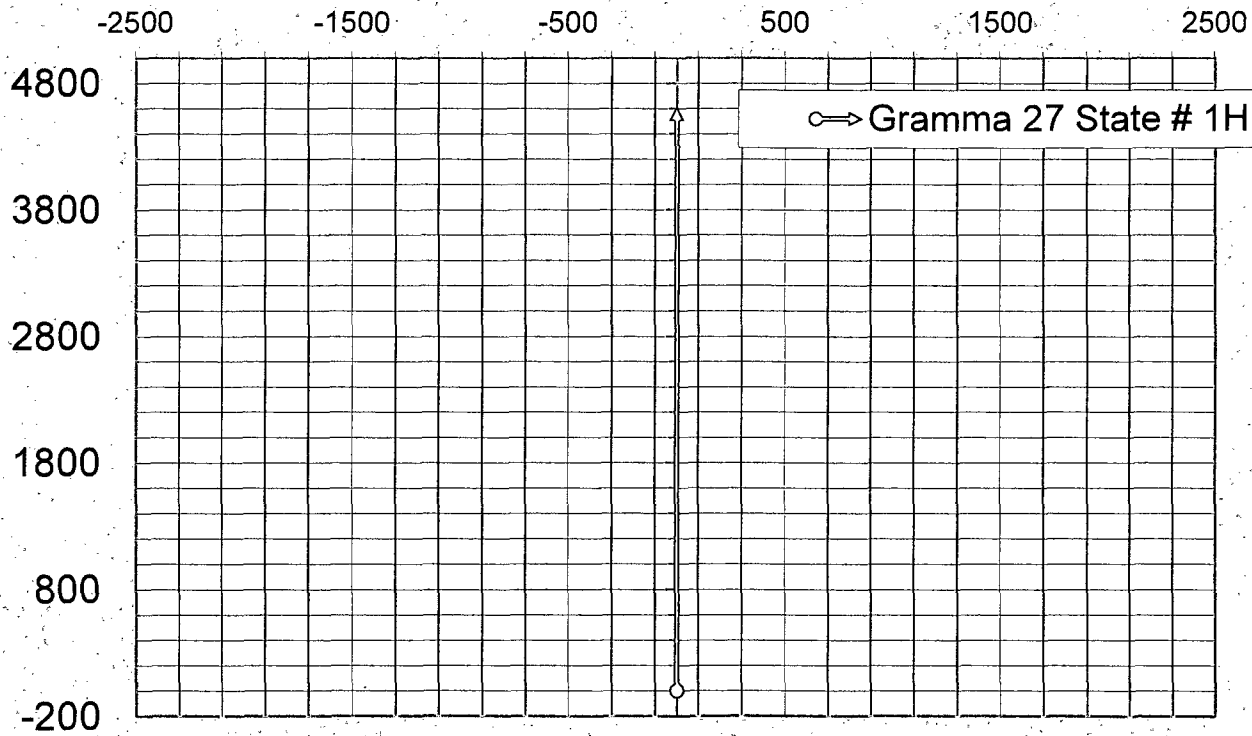
1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 1800'. Run and set 1800' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 1306 Sx. of Class "C" cement + 4% Gel, + 2% CaCl, Yield 1.74, tail in with 200 Sx. of Class "C" cement + 2% CaCl, Yield 1.32. 100% Excess circulate cement to surface.
3. Drill 12½" hole to 5700'. Run and set 5700' of 9 5/8" 40# casing as follows: 1800' of 9 5/8" 40# HCK-55 LT&C, 3900' of 9 5/8" 40# J-55 LT&C casing. Cement with 1032 Sx. of 35/65 Class "C" POZ cement + 5% Salt, + 6% Gel, Yield 2.09, tail in with 300 Sx. of Class "C" cement + 1% CaCl, Yield 1.32. 100% Excess circulate cement to surface.
4. Drill 8 3/4" pilot hole to 11,500'. Run open hole logs, plug back to KO point at 10,625±'. Drill curve with 8 3/4" bit to 11,370±', continue drilling with 8 3/4" bit to a measured depth of 15,515±'. Run and set 15,515' of 5½" 17# P-110 LT&C casing. Cement with 947 Sx. of 35/65 Class "H" POZ cement + 1#/Sx. of KOL-seal, Yield 1.93, tail in with 801 Sx. of Class "H" SoluCem cement + fluid loss control, + Acid Soluble Defoamer, Yield 2.61. 50% Excess estimate top of cement 5500' from surface.

Gamma 27 State # 1H



Horizontal Plane Footage +East/-West

Footage + North/- South



LONG'S METHOD OF SURVEY COMPUTATION

OBLIQUE CIRCULAR ARC INTERPOLATION

6000	MD OF INTERPOLATION DEPTH,(feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

3 D DISTANCE BETWEEN STATION A AND STATION B

DISTANCE TABLE

STATION A	STATION B
400.00	600.00
300.00	400.00
100.00	300.00
300.00	ft

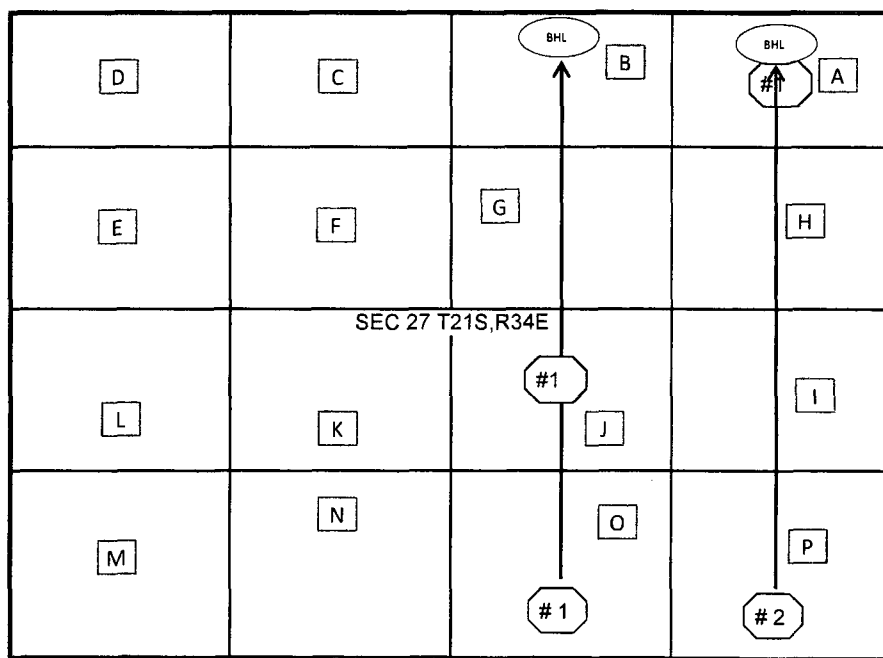
TABLE OF SURVEY STATIONS

Calculator =

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+S- ft	E+W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	10623.00	10623.00	0.00	0.00	-
2	100	12	0	10723.00	10722.27	10.43	0.00	12.00
3	100	24	0	10823.00	10817.20	41.28	0.00	12.00
4	100	36	0	10923.00	10903.65	91.19	0.00	12.00
5	100	48	0	11023.00	10977.83	157.98	0.00	12.00
6	100	60	0	11123.00	11036.50	238.73	0.00	12.00
7	100	72	0	11223.00	11077.10	329.92	0.00	12.00
8	100	84	0	11323.00	11097.85	427.56	0.00	12.00
9	50	90	0	11373.00	11100.46	477.46	0.00	12.00
10	100	90	0	11473.00	11100.46	577.46	0.00	0.00
11	100	90	0	11573.00	11100.46	677.46	0.00	0.00
12	100	90	0	11673.00	11100.46	777.46	0.00	0.00
13	100	90	0	11773.00	11100.46	877.46	0.00	0.00
14	100	90	0	11873.00	11100.46	977.46	0.00	0.00
15	100	90	0	11973.00	11100.46	1077.46	0.00	0.00
16	100	90	0	12073.00	11100.46	1177.46	0.00	0.00
17	100	90	0	12173.00	11100.46	1277.46	0.00	0.00
18	100	90	0	12273.00	11100.46	1377.46	0.00	0.00
19	100	90	0	12373.00	11100.46	1477.46	0.00	0.00
20	100	90	0	12473.00	11100.46	1577.46	0.00	0.00
21	100	90	0	12573.00	11100.46	1677.46	0.00	0.00
22	100	90	0	12673.00	11100.46	1777.46	0.00	0.00
23	100	90	0	12773.00	11100.46	1877.46	0.00	0.00
24	100	90	0	12873.00	11100.46	1977.46	0.00	0.00
25	100	90	0	12973.00	11100.46	2077.46	0.00	0.00
26	100	90	0	13073.00	11100.46	2177.46	0.00	0.00
27	100	90	0	13173.00	11100.46	2277.46	0.00	0.00
28	100	90	0	13273.00	11100.46	2377.46	0.00	0.00
29	100	90	0	13373.00	11100.46	2477.46	0.00	0.00
30	100	90	0	13473.00	11100.46	2577.46	0.00	0.00
31	100	90	0	13573.00	11100.46	2677.46	0.00	0.00
32	100	90	0	13673.00	11100.46	2777.46	0.00	0.00
33	100	90	0	13773.00	11100.46	2877.46	0.00	0.00
34	100	90	0	13873.00	11100.46	2977.46	0.00	0.00
35	100	90	0	13973.00	11100.46	3077.46	0.00	0.00
36	100	90	0	14073.00	11100.46	3177.46	0.00	0.00
37	100	90	0	14173.00	11100.46	3277.46	0.00	0.00
38	100	90	0	14273.00	11100.46	3377.46	0.00	0.00
39	100	90	0	14373.00	11100.46	3477.46	0.00	0.00
40	100	90	0	14473.00	11100.46	3577.46	0.00	0.00
41	100	90	0	14573.00	11100.46	3677.46	0.00	0.00
42	100	90	0	14673.00	11100.46	3777.46	0.00	0.00
43	100	90	0	14773.00	11100.46	3877.46	0.00	0.00
44	100	90	0	14873.00	11100.46	3977.46	0.00	0.00
45	100	90	0	14973.00	11100.46	4077.46	0.00	0.00
46	100	90	0	15073.00	11100.46	4177.46	0.00	0.00
47	100	90	0	15173.00	11100.46	4277.46	0.00	0.00
48	100	90	0	15273.00	11100.46	4377.46	0.00	0.00
49	100	90	0	15373.00	11100.46	4477.46	0.00	0.00
50	142	90	0	15515.00	11100.46	4619.46	0.00	0.00
51								

Gramma 27 State # 1H_ Bone Springs Horizontal

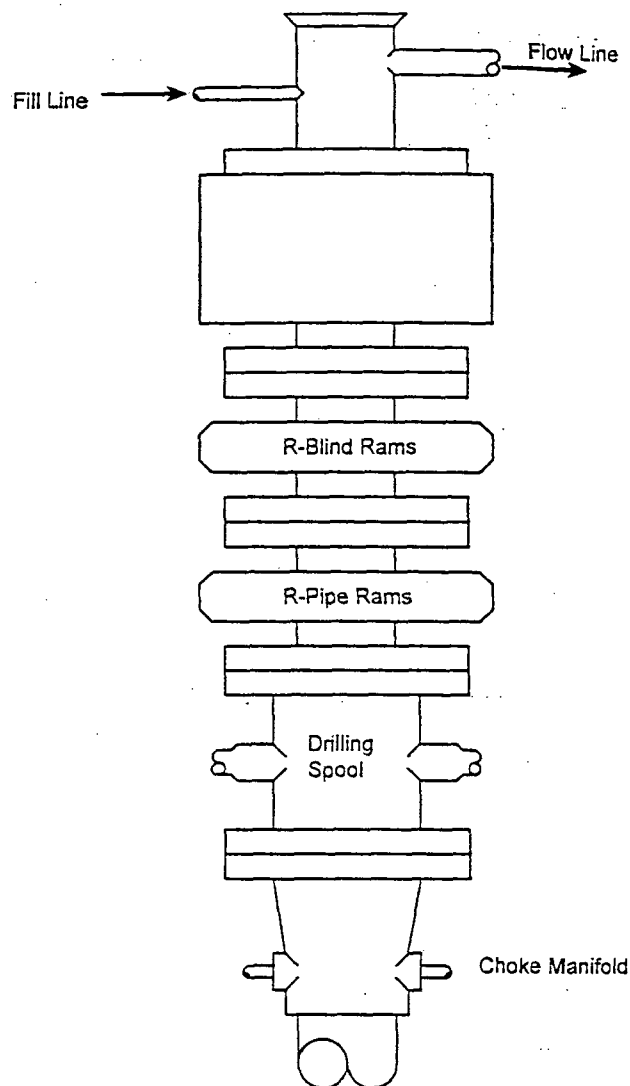
Sec 27, T-21-S, R-34-E, Lea County, New Mexico



Well Name	Surface Location	Depth and Strata	Current Prod Zone	Bottom Hole Location 8350 tvd	
Gramma 27 State #1H	330 FSL & 1980 FEL	TD = 11,300 Wolfcamp	3rd Bone Test	330 FNL & 1980 FEL	Caza Proposed 3rd Bone Springs
Gramma 27 State # 2H	330 FSL & 660 FEL	TD = 11,750 Wolfcamp	3rd Bone Test	330 FNL & 660 FEL	Caza Proposed 3rd Bone Springs
State B 9611 # 1	660 FNL & 660 FEL	TD = 4100' Yates	Plugged	Vertical	Wilson Oil Co
State B 9511 # 1	1980 FSL & 1980 FEL	TD = 3676' Yates	Plugged	Vertical	Wilson Oil Co
GRW # 1	1980 FNL & 1650 FEL	TD = 13,400 Morrow	Plugged	Vertical	POGO Production Co
Gramma "B" 8817 JVP-1	660 FSL & 1980 FWL	TD = 13,306 Morrow	Plugged	Vertical	BTA Producers
Gramma "B" 8817 JVP-2	1980 FSL & 860 FEL	TD = 13,280 Mrw. Del Tst. 8284-8320. plugged 1994	Plugged	Vertical	BTA Producers.

BLOWOUT PREVENTER SYSTEM

5000 PSI



Type 1500 SERIES
5000 psi WP

Choke Manifold Assembly for 5M WP System

