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

HOBBS OCD
JUN 26 2014
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised July 18, 2013

WELL API NO.	30-025-41888
5. Indicate Type of Lease	STATE [X] FEE [ ]
6. State Oil & Gas Lease No.	VB-2294
7. Lease Name or Unit Agreement Name	Gramma 27 State
8. Well Number	2H
9. OGRID Number	249099
10. Pool name or Wildcat	Grama Ridge; Bone Spring NE 28435

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 [X] Gas Well [ ] Other
2. Name of Operator: Caza Operating, LLC
3. Address of Operator: 200 North Loraine, Suite 1550, Midland, Texas 79701
4. Well Location
Unit Letter A : 330 feet from the North line and 500 feet from the East line
Section 27 Township 21 S Range 34 E NMPM County
11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3688 ft GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]	CHANGE PLANS [X]	COMMENCE DRILLING OPNS. [ ]	P AND A [ ]
PULL OR ALTER CASING [ ]	MULTIPLE COMPL [ ]	CASING/CEMENT JOB [ ]	
DOWNHOLE COMMINGLE [ ]			
CLOSED-LOOP SYSTEM [ ]			
OTHER: [ ]		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.

Caza Operating, LLC respectfully request permission to change the target of the lateral in the subject well from the 3rd Bone Springs interval ± 11,200 ft TVD approved in the original APD to the 2nd Bone Springs interval located ± 10,290 ft TVD. Attached is the new directional summary, cement program & 5-1/2" casing design. Hole sizes & mud program will remain the same.

Spud Date: June 11th, 2014 Rig Release Date:

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

SIGNATURE Richard L Wright TITLE Operations Manager DATE 6-24-2014

Type or print name Richard L. Wright E-mail address: rwright@cazapetro.com PHONE: 432 682 7424

For State Use Only

APPROVED BY: TITLE Petroleum Engineer DATE 06/30/14

Conditions of Approval (if any):

JUL 01 2014

Gramma 27 State # 2H-2nd Bone Spring
Caza Operating, LLC
Lea County, New Mexico

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)

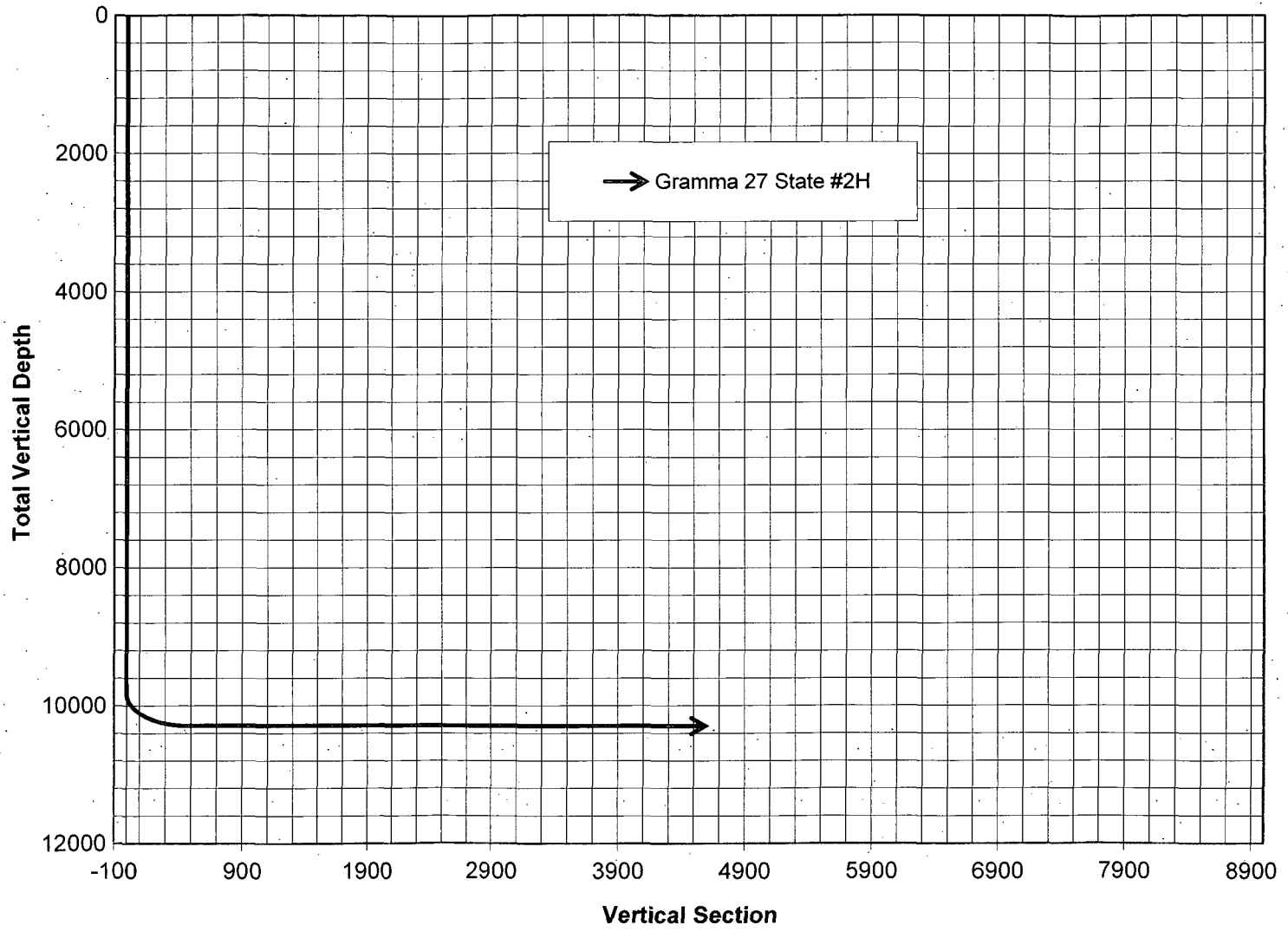
DISTANCE TABLE

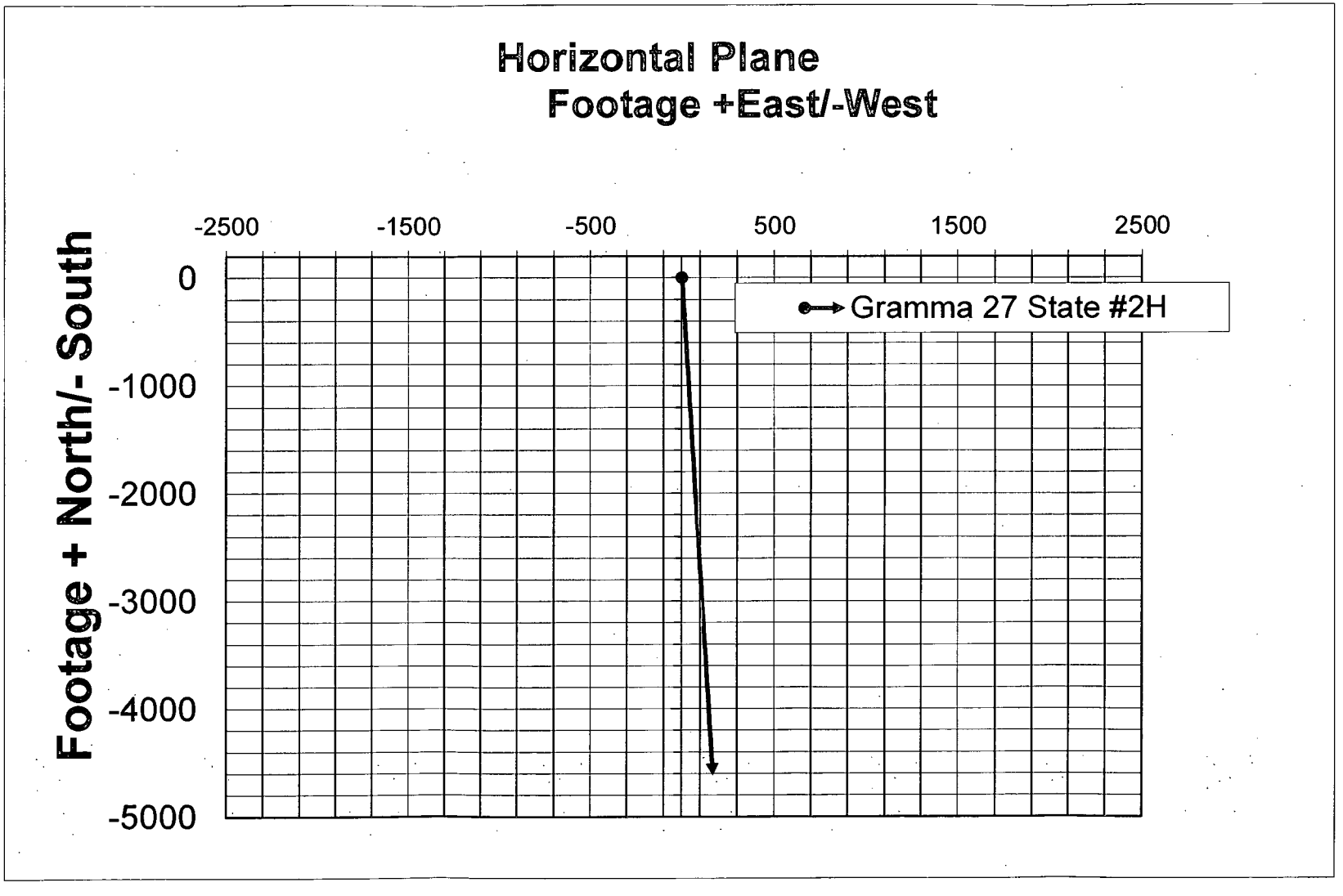
STATION A	STATION B
400.00	600.00
300.00	400.00
100.00	300.00
3 D DISTANCE BETWEEN STATION A AND STATION B	300.00 ft
Calculator =	

TABLE OF SURVEY STATIONS

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+/S- ft	E+/W- ft	DLS deg/100FT
1	TIE POINT =>	0	177.9	9812.00	9812.00	0.00	0.00	-
2	100	12	177.9	9912.00	9911.27	-10.43	0.38	12.00
3	100	24	177.9	10012.00	10006.20	-41.25	1.51	12.00
4	100	36	177.9	10112.00	10092.65	-91.13	3.34	12.00
5	100	48	177.9	10212.00	10166.83	-157.87	5.79	12.00
6	100	60	177.9	10312.00	10225.50	-238.57	8.75	12.00
7	100	72	177.9	10412.00	10266.10	-329.70	12.09	12.00
8	100	84	177.9	10512.00	10286.85	-427.27	15.67	12.00
9	50	90	177.9	10562.00	10289.46	-477.14	17.50	12.00
10	100	90	177.9	10662.00	10289.46	-577.08	21.16	0.00
11	100	90	177.9	10762.00	10289.46	-677.01	24.82	0.00
12	100	90	177.9	10862.00	10289.46	-776.94	28.49	0.00
13	100	90	177.9	10962.00	10289.46	-876.88	32.15	0.00
14	100	90	177.9	11062.00	10289.46	-976.81	35.82	0.00
15	100	90	177.9	11162.00	10289.46	-1076.74	39.48	0.00
16	100	90	177.9	11262.00	10289.46	-1176.67	43.15	0.00
17	100	90	177.9	11362.00	10289.46	-1276.61	46.81	0.00
18	100	90	177.9	11462.00	10289.46	-1376.54	50.48	0.00
19	100	90	177.9	11562.00	10289.46	-1476.47	54.14	0.00
20	100	90	177.9	11662.00	10289.46	-1576.41	57.80	0.00
21	100	90	177.9	11762.00	10289.46	-1676.34	61.47	0.00
22	100	90	177.9	11862.00	10289.46	-1776.27	65.13	0.00
23	100	90	177.9	11962.00	10289.46	-1876.20	68.80	0.00
24	100	90	177.9	12062.00	10289.46	-1976.14	72.46	0.00
25	100	90	177.9	12162.00	10289.46	-2076.07	76.13	0.00
26	100	90	177.9	12262.00	10289.46	-2176.00	79.79	0.00
27	100	90	177.9	12362.00	10289.46	-2275.94	83.45	0.00
28	100	90	177.9	12462.00	10289.46	-2375.87	87.12	0.00
29	100	90	177.9	12562.00	10289.46	-2475.80	90.78	0.00
30	100	90	177.9	12662.00	10289.46	-2575.73	94.45	0.00
31	100	90	177.9	12762.00	10289.46	-2675.67	98.11	0.00
32	100	90	177.9	12862.00	10289.46	-2775.60	101.78	0.00
33	100	90	177.9	12962.00	10289.46	-2875.53	105.44	0.00
34	100	90	177.9	13062.00	10289.46	-2975.47	109.11	0.00
35	100	90	177.9	13162.00	10289.46	-3075.40	112.77	0.00
36	100	90	177.9	13262.00	10289.46	-3175.33	116.43	0.00
37	100	90	177.9	13362.00	10289.46	-3275.26	120.10	0.00
38	100	90	177.9	13462.00	10289.46	-3375.20	123.76	0.00
39	100	90	177.9	13562.00	10289.46	-3475.13	127.43	0.00
40	100	90	177.9	13662.00	10289.46	-3575.06	131.09	0.00
41	100	90	177.9	13762.00	10289.46	-3675.00	134.76	0.00
42	100	90	177.9	13862.00	10289.46	-3774.93	138.42	0.00
43	100	90	177.9	13962.00	10289.46	-3874.86	142.08	0.00
44	100	90	177.9	14062.00	10289.46	-3974.79	145.75	0.00
45	100	90	177.9	14162.00	10289.46	-4074.73	149.41	0.00
46	100	90	177.9	14262.00	10289.46	-4174.66	153.08	0.00
47	100	90	177.9	14362.00	10289.46	-4274.59	156.74	0.00
48	100	90	177.9	14462.00	10289.46	-4374.52	160.41	0.00
49	100	90	177.9	14562.00	10289.46	-4474.46	164.07	0.00
50	100	90	177.9	14662.00	10289.46	-4574.39	167.74	0.00
51	45	90	177.9	14707.00	10289.46	-4619.36	169.38	0.00

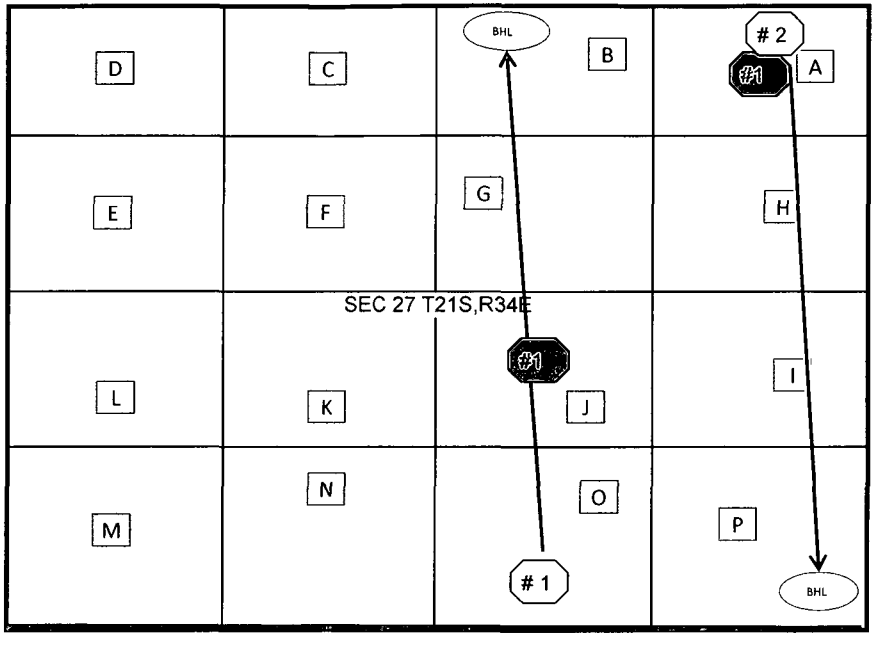
Gramma 27 State # 2H




Horizontal Plane
Footage +East/-West
Footage + North/- South
-2500
-1500
-500
500
1500
2500
0
-1000
-2000
-3000
-4000
-5000
Gramma 27 State #2H

Gramma 27 State # 2H_ 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	
Gramma 27 State # 2H	330 FNL & 500 FEL	TD = 11,200 3rd Bone	3rd Bone Test	330 FNL & 660 FEL	Caza Proposed 3rd Bone Springs
Gramma 27 State #1H	330 FSL & 1980 FEL	TD = 11,200 3rd Bone	3rd Bone Producing	350 FNL & 2290 FEL	Caza Drilled.
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.
GRN 27 State Com # 1	1330 FNL & 1650 FEL	Proposed TD = 13400 Morrow	Permitted NOT DRILL	Vertical	Devon Energy. Not Drilled

Caza Petroleum

Gramma 27 State #2 H "Cement Program 2nd Bone" NE/NE_Section 27, T21S, R34E, Lea County, New Mexico. 5.5 inch Csg Cement adjustment.

1. **Production Hole depth= 14,707 ft.** "10,290 ft" TVD. **TOC @ 5000 ft** w/ 50% W/O Production Hole = 8.75inch to 14,707. Note:
   Lateral = 10,562 – 14,707 MD.

   Production Hole Casing = 5-1/2 inch 20# P-110 LTC
   Hardware Needed = 24 spring Centralizers
   47 Rigid Centralizers for Lateral. (1 every other Jt)
   Float Collar (1 jt up)
   Float Shoe
   TOC calculated to 5000 ft w/ 50% Washout open hole.

   Engineering Data "Production":
   700 ft 9-5/8" 40# X 5-1/2" Csg= 700' X .2607 cu ft / ft = **182 cu ft.**
   9007 ft 8.75 inch open hole x 5-1/2"20 # casing = 9007' X .2526 x 1.5 excess = **3413 cu ft**
   120 ft 5.5" 20# casing volume= .1245 X 44 ft = **5.5cu ft**
   Total Cement volume required = 3601 cu ft.
   Lead Slurry (9,800'-5,000')= 1735 cu ft 65/35 Poz/"H"mixed @12.6 ppg w/yield 1.93 cu ft/sk 1 lb/sk KOL seal = **(900 sks)**
   Tail Slurry (14,707'-9,800')= 1866 cu ft "H" SoluCem mixed 15.0 ppg w/ yield of 2.61 cu ft/sk w/ fluid loss control + Defoamer "Acid soluble" = **715 sks**

   Volumes to be adjusted after log review and mud logger lag review post drilling

Well name: **Gramma 27 State # 2H**

Operator: **Caza Operating, LLC**

String type: **Production Csg: Fracture Stimulate**

Location: New Mexico, Lea County

Design parameters:			**Minimum design factors:**		**Environment:**		
Collapse			**Collapse:**		H2S considered?	No	
Mud weight:	10.00	ppg	DF	1.125	Surface temperature:	75.00	°F
Design is based on evacuated pipe.					Bottom hole temperature:	157	°F
					Temperature gradient:	0.80	°F/100ft
					Minimum section length:	1,500	ft
			Burst:		Minimum Drift:	4.650	in
			DF	1.12	Cement top:	5,064	ft
Burst							
Max anticipated surface pressure:	9,456.10	psi					
Internal gradient:	0.12	psi/ft	**Tension:**		Directional well information:		
Calculated BHP	10,690.89	psi	8 Rd STC:	1.80	(J) Kick-off point	9717	ft
			8 Rd LTC:	1.80	(J) Departure at shoe:	4620	ft
Annular backup:	3.00	ppg	Buttress:	1.60	(J) Maximum dogleg:	10	°/100ft
			Premium:	1.50	(J) Inclination at shoe:	90	°
			Body yield:	1.50	(B)		

Tension is based on buoyed weight.
Neutral pt: 8,732.26 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	14664	5.5	20.00	HCP-110	CDC-HTQ	10290	14664	4.653	1825.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	5345	12200	2.282	9456	12640	1.34	175	641	3.67 B

Prepared by: Wright — Phone: 432 682 7424 — Date: June 23,2014 — Midland, Texas

Remarks:

Collapse is based on a vertical depth of 10290 ft, a mud weight of 10 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

Engineering responsibility for use of this design will be that of the purchaser.