

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

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

Form C-103
Revised July 18, 2013

WELL API NO: 30-015-39995
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. VB 1139
7. Lease Name or Unit Agreement Name Forehand Ranch 27 State
8. Well Number 2
9. OGRID Number 249099
10. Pool name or Wildcat Cass Draw, Delaware

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
Caza Operating, LLC

3. Address of Operator
200 N. Loraine, Suite 1550, Midland, Texas 79701

4. Well Location
Unit Letter C 330 feet from the North line and 1980 feet from the West line
Section 27 Township 23-S Range 27-E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3161 GR

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.

Caza Operating will change the current approved APD from a Bone Spring Horizontal Test to a vertical Delaware test. TD has changed from 13,000 md to 4000' md. Casing Depths are as shown:

Surface Hole = 17-1/2" hole w/ 13-3/8" 48 lb H-40 STC casing set @ 450'

Intermediate Hole = 11" hole w/ 8-5/8" 24 lb J-55 STC casing set @ 2050'

Production hole = 7-7/8" hole w/ 5-1/2 15.5 lb J-55 LTC casing set @ 4000'

We will maintain the same closed loop system that was previously approved. All cuttings will be hauled to a approved site.

Attached is the planned well bore schematic along with the revised casing plan & the revised cement program. ✓

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

Richard L. Wright

TITLE Operations Manager

DATE 4-17-2014

Type or print name Richard L. Wright

E-mail address: rwright@cazapetro.com

PHONE: 432 682 7424

For State Use Only

APPROVED BY:

J.C. Shepard

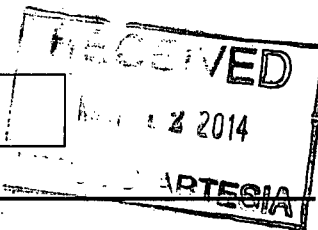
TITLE

"Geologist"

DATE

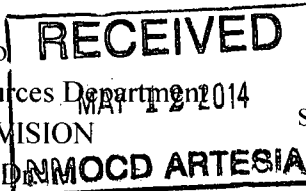
5-12-2014

Conditions of Approval (if any):



District I
1625 N. French Dr., Hobbs, NM 88240
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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 30-015-39995	² Pool Code 10410	³ Pool Name Cass Draw, Delaware
⁴ Property Code 39026	⁵ Property Name Forehand Ranch 27 State	
⁷ OGRID No. 249099	⁸ Operator Name Caza Operating, LLC	⁶ Well Number 2
		⁹ Elevation 3161

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
C	27	23 S	27 E		330	North	1980	West	Eddy

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
¹² Dedicated Acres 40		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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

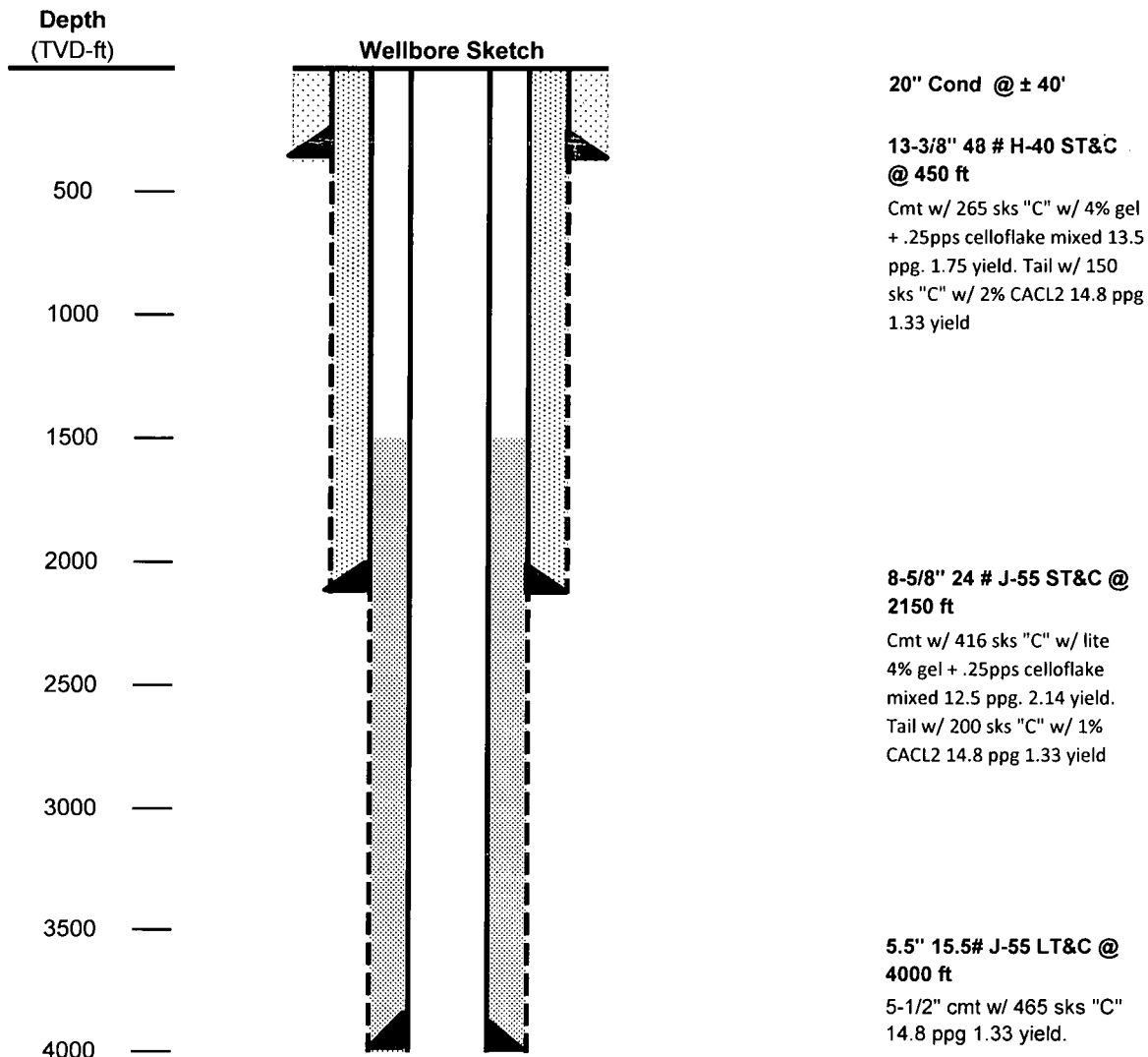
¹⁶ 	Surface location Lat - N 32°16' 55.79" Long- W 104°10' 47.29" Nad 83	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest 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: <i>Richard L. Wright</i> Date: 4-17-2014 Printed Name: Richard L. Wright
		E-mail Address: rwright@cazapetro.com
		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.
		Date of Survey Signature and Seal of Professional Surveyor:
		Certificate Number

Forehand Ranch 27 State # 2

Location: NE/NW Section 27_T23S_R27E_Eddy County, New Mexico



Well Bore Plan



Forehand 27 State Com # 2_Delaware“Cement Worksheet”

Location 330 FNL_& 1980 FWL, Sec 27, T23S, R27E, Eddy County, New Mexico

1. **Surface hole depth = 450 ft. TOC @surface w/ 100% W/O**

Surface hole = 17.5 inch

Surface casing = 13.375" 48# H-40 STC

Float Collar 1 jts up.

Hardware needed = 8 spring centralizers

1 Guide shoe "Tx Pattern"

1 Insert float valve (1 jt Up)

1 thread lock compound

1 collar stop

Engineering Data "Surface" 100% excess: Lead & tail & lead must have minimum 500 psi strength in 18 hrs.

450 ft 17.5 inch hole x 13.375" csg = 450' X .6946 cu ft X 2 excess = 625 cu ft

40 ft 13.375" 48 # casing volume= .8817 X 44 ft = 39 cu ft

Total Cement volume required = 664 cu ft.

Lead slurry = 464 cu ft "C" w/ 4% bentonite + 2% CaCl₂ +.25 pps celloflake w/ 1.75 yield 13.5 ppg = (265 sks)

Tail Slurry = 200 cu ft Class "C" w/ 2% CaCl₂ 14.8 ppg yield 1.33 cu ft / sk = (150 sks)

2. **Intermediate Casing Depth = 2150 ft. TOC @Surface w/ 100 % Excess 2050-450'.**

Intermediate hole = 11 inch

Intermediate Casing = 8.625" 24# J-55 STC

Float Collar 1 jts up.

Hardware needed = 12 spring centralizers

1 Guide Shoe

1 float collar (1 jt up)

1 thread lock compound

Engineering Data "Production String":

2050 ft 11 inch open hole x 8.625 csg = 1600' x .2542 cu ft X 2.00 excess = 934 cu ft

450 ft 13.375 48#" x 8.625" casing = .4760 cu ft/ft X 450 = 214 cu ft

44 ft 8-5/8" 24# casing Capacity= .3575 X 44 ft = 16 cu ft

Total Cement volume required = 1164 cu ft.

Lead Slurry Coverge 1526-surf = 898 cu ft "C" lite 35:65:4 poz/gel w/ 5% NaCl 2.16 yield
12.5 ppg. = **(416 sks)**

Tail Slurry Coverage 2050'-1526' = 266 cu ft Class "C" w/ 1% CaCl₂ 14.8 ppg yield 1.33 cu
ft / sk = **(200 sks)**

3. Production Csg Depth = 4000 ft. TOC @ 1500' FS w/ 50 %

Intermediate hole = 7.875 inch

Intermediate Casing = 5.5" 15.5# J-55 LTC

Float Collar 1 jts up.

Hardware needed = 12 spring centralizers
 1 Guide Shoe
 1 float collar (1 jt up)
 1 thread lock compound

Engineering Data "Production String":

1950 ft 7.875 inch open hole x 5.5 csg = 1950' x .1733 cu ft X 1.5 excess = 507 cu ft

550 ft 5.5" x 8.625" casing = .1926 cu ft/ft X 550 = 106 cu ft

44 ft 5.5 "15.5 # casing Capacity= .1336 X 44 ft = 6.0 cu ft

Total Cement volume required = 619 cu ft.

Slurry Coverge 4000-1500 = 619 cu ft "C" w/ 1.33 yield 14.8 ppg. = **(465 sks)**

Well name:

Forehand 27 State # 2

Operator: **Caza Operating, LLC**

String type: **Surface Casing**

Design parameters:

Collapse

Mud weight: 8.50 ppg

Minimum design factors:

Collapse:

DF 1.125

Environment:

H2S considered?

No

Surface temperature: 75.00 °F

Design is based on evacuated pipe.

Bottom hole temperature: 78 °F

Temperature gradient: 0.65 °F/100ft

Minimum section length: 50 ft

Minimum Drift: 12.250 in

Cement top: Surface

Burst:

DF 1.10

Burst

Max anticipated surface pressure:

238.70 psi

Internal gradient: 0.12 psi/ft

Calculated BHP 292.70 psi

Tension:

8 Rd STC: 1.80

8 Rd LTC: 1.80

Buttress: 1.60

Premium: 1.50

Body yield: 1.60

Non-directional string.

(J)

(J)

(J)

(J)

(B)

Re subsequent strings:

Next setting depth: 2,050 ft

Next mud weight: 10.000 ppg

Next setting BHP: 1,065 psi

Tension is based on buoyed weight.

Neutral pt: 394.02 ft

Fracture mud wt: 11.500 ppg

Fracture depth: 500 ft

Injection pressure 299 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)		
1	450	13.375	48.00	H-40	ST&C	450	450	12.59		
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	199	740	3.724	293	1730	5.91	18.9	322	17.03 J	
									Date:	April 17, 2014
									Midland, Texas	

Remarks:

Collapse is based on a vertical depth of 450 ft, a mud weight of 8.5 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.

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

Well name:

Forehand 27 State # 2

Operator: **Caza Operating, LLC**

String type: **Intermediate Casing**

Design parameters:

Collapse

Mud weight: 10.00 ppg

Minimum design factors:

Collapse:

DF 1.125

Environment:

H2S considered? No
 Surface temperature: 75.00 °F
 BHT 88 °F
 Temp Gradient 0.65 °F/100ft
 Min Sec Length 450 ft
 Cement top: Surface

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 978.68 psi

Internal gradient: 0.12 psi/ft

Calculated BHP 1,224.68 psi

No backup mud specified.

Tension:

8 Rd STC: 1.80 (J)
 8 Rd LTC: 1.80 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.60 (B)

Non-directional string.

Re subsequent strings:

Next setting depth: 4,000 ft
 Next mud weight: 8.500 ppg
 Next setting BHP: 1,766 psi
 Fracture mud wt: 11.500 ppg
 Fracture depth: 2,050 ft
 Injection pressure 1,225 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	
1	2050	8.625	24.00	J-55	ST&C	2050	2050	7.972	
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	1065	1370	1.286	1225	2950	2.41	41.8	244	5.84 J
								Date:	17-Apr-14
R.Wright								Midland, Texas	

Remarks:

Collapse is based on a vertical depth of 2050 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.

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

Franch

Well name:

Forehand 27 State # 2

Operator: **Caza Operating, LLC**

String type: **Production Casing "Frac"**

Design parameters:

Collapse

Mud weight: 12.40 ppg

Minimum design factors:

Collapse:

DF 1.200

Environment:

H2S considered?

No

Surface temperature:

75.00

°F

Design is based on evacuated pipe.

BHT

103

°F

Temp Gradient

0.70

°F/100ft

Min Section Length

1,000

ft

Minimum Drift:

4.750

in

Cement top:

1,500

ft

Burst:

DF

1.20

Burst

Max anticipated surface pressure:

2,805.20 psi

Internal gradient:

0.00 psi/ft

Tension:

Non-directional string.

Calculated BHP

2,805.20 psi

8 Rd STC: 1.80

(J)

8 Rd LTC: 1.80

(J)

Buttress: 1.60

(J)

Premium: 1.50

(J)

Body yield: 1.60

(B)

No backup mud specified.

Tension is based on buoyed weight.

Neutral pt: 3,249.61 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)	
1	4000	5.5	15.50	K-55	LT&C	4000	4000	4.825	
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	2577	4040	1.568	2805	4810	1.71	50.4	239	4.74 J
R.Wright									Date: April 17, 2014 Midland, Texas

Remarks:

Collapse is based on a vertical depth of 4000 ft, a mud weight of 12.4 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.

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