	,	HOBBS OC FEB 192 RECE	D 018				
Form 3160 -3 (March 2012) UNITED STA'	TES	FEBIS	NED	FORM AF OMB No. 1 Expires Octo			
DEPARTMENT OF TH BUREAU OF LAND M	E INTERIOR	RECL		5. Lease Serial No. NMNM132945			
APPLICATION FOR PERMIT				6. If Indian, Allotee or	Tribe Name		
la. Type of work: 🖌 DRILL 🗌 REF	ENTER			7. If Unit or CA Agreem	ent, Name and No.		
lb. Type of Well: ✓ Oil Well Gas Well Other	✓ Si	ngle Zone Multip	ole Zone	8. Lease Name and We EAGLECLAW FEDER			
2. Name of Operator CAZA OPERATING LLC	9099)			9. API Well No. 30-025-	44495		
3a. Address 200 N. Loraine Street, Suite 1550 Midland). (include area code) 7424		10. Field and Pool, or Exploratory WOLFCAMP / WC-025 G-08 S203517M;			
4. Location of Well (Report location clearly and in accordance with At surface NENW / 190 FNL / 2173 FWL / LAT 32.60 At proposed prod. zone NESW / 1675 FSL / 2175 FWL)831	11. Sec., T. R. M. or Blk. and Survey or Area SEC 5 / T20S / R35E / NMP					
14. Distance in miles and direction from nearest town or post office ⁴ 13 miles	¢			12. County or Parish LEA	13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	stance from proposed* ation to nearest 190 feet 322.32			 Spacing Unit dedicated to this well 80 			
 Distance from proposed location* to nearest well, drilling, completed, 1200 feet applied for, on this lease, ft. 	19. Propose 11250 fee	d Depth et / 19748 feet		IA Bond No. on file IB000471			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3694 feet	22. Approxi 01/30/201	mate date work will sta 18	rt*	23. Estimated duration45 days			
	24. Atta						
 The following, completed in accordance with the requirements of Or Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sys SUPO must be filed with the appropriate Forest Service Office) 	tem Lands, the	 Bond to cover the litem 20 above). Operator certification 	he operation	is form: ns unless covered by an ex prmation and/or plans as ma			
25. Signature (Electronic Submission)		(Printed Typed) B Sam / Ph: (432)6	682-7424		ate 2/07/2017		
Title VP Operations							
Approved by (Signature) (Electronic Submission)		(Printed Typed) Layton / Ph: (575)2	234-5959		ate 02/01/2018		
Title Supervisor Multiple Resources Application approval does not warrant or certify that the applicant conduct operations thereon. Conditions of approval, if any, are attached.		LSBAD	ts in the sub	ject lease which would enti	tle the applicant to		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representation	t a crime for any p is as to any matter y	person knowingly and w within its jurisdiction.	villfully to m	ake to any department or a	gency of the United		

(Continued on page 2)



*(Instructions on page 2) KB19/18

Additional Operator Remarks

Location of Well

SHL: NENW / 190 FNL / 2173 FWL / TWSP: 20S / RANGE: 35E / SECTION: 5 / LAT: 32.609071 / LONG: -103.481016 (TVD: 0 feet, MD: 0 feet)
 PPP: NENW / 456 FNL / 2176 FWL / TWSP: 20S / RANGE: 35E / SECTION: 5 / LAT: 32.608321 / LONG: -103.481011 (TVD: 11250 feet, MD: 11577 feet)
 BHL: NESW / 1675 FSL / 2175 FWL / TWSP: 20S / RANGE: 35E / SECTION: 8 / LAT: 32.585038 / LONG: -103.480831 (TVD: 11250 feet, MD: 19748 feet)

BLM Point of Contact

Name: Judith Yeager Title: Legal Instruments Examiner Phone: 5752345936 Email: jyeager@blm.gov

Approval Date: 01/31/2018

(Form 3160-3, page 3)

13 3/8	surface	e csg in a 17 1/2	inch hole.	D	esign Facto	ors	SUR	FACE
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	54.50	J 55	ST&C	4.81	1.25	1.04	1,960	106,820
"B"							0	0
w/8.4#	/g mud, 30min	Sfc Csg Test psig: 1,056	Tail Cmt	does not	circ to sfc.	Totals:	1,960	106,820
comparison o	f Proposed to	o Minimum Required Cer	nent Volumes					
Hole	Annular	1 Stage 1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx CuFt Cm		% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
17 1/2	0.6946	1166 2152	1435	50	8.90	1514	2M	1.56
9 5/8	casing in	nside the 13 3/8			Design Fa	ctors	INTERN	MEDIATE
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.00	L 80	LT&C	4.43	1.45	1.08	4,100	164,000
"B"	AND SHE IS						0	0
w/8.4#	g mud, 30min	Sfc Csg Test psig: 1,500				Totals:	4,100	164,000
Size	Annular Volume	1 Stage 1 Stage Cmt Sx CuFt Cm		1 Stage % Excess	Mud Wt	Calc MASP	Req'd BOPE	
12 1/4 Set excess cmi Class 'C' tail cm	Volume 0.3132 tting Depths f t by stage % : tt yld > 1.35	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38			10.00	MASP 2843 sum of sx 1636	BOPE 3M <u>Σ CuFt</u> 3309	Hole-Cplg 0.81 Σ%excess 136
12 1/4 Set excess cmi Class 'C' tail cm 5 1/2	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 casing in	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38	t Cu Ft 1400	% Excess 50	10.00 Design Fa	MASP 2843 sum of sx 1636 ctors P	BOPE 3M Σ CuFt 3309	Σ%excess 136
12 1/4 Set excess cml Class 'C' tail cm 5 1/2 Segment	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 casing in #/ft	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38 inside the 9 5/8 Grade 9 5/8	t Cu Ft 1400 Coupling	% Excess 50 Body	10.00 Design Fa Collapse	MASP 2843 sum of sx 1636 Ctors P Burst	BOPE 3M Σ CuFt 3309 RODUCTIO Length	Hole-Cplg 0.81 Σ%excess 136 N Weight
12 1/4 Set excess cml ilass 'C' tail cm 5 1/2 Segment "A"	Volume 0.3132 tting Depths f t by stage % : nt yld > 1.35 casing in #/ft 17.00	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38 inside the 9 5/8 Grade P 110	t Cu Ft 1400 Coupling BUTT	% Excess 50 Body 2.85	10.00 Design Fa Collapse 1.48	MASP 2843 sum of sx 1636 ctors P Burst 2	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509
12 1/4 Set excess cml class 'C' tail cm 5 1/2 Segment "A" "B"	Volume 0.3132 tting Depths f t by stage % : tt yld > 1.35 casing in #/ft 17.00 17.00	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38 Inside the 95/8 Grade P 110 P 110	t Cu Ft 1400 Coupling	% Excess 50 Body	10.00 Design Fa Collapse	MASP 2843 sum of sx 1636 <u>ctors</u> P Burst 2 2 2	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677 9,071	Hole-Cpls 0.81 Σ%excess 136 N Weight 181,509 154,207
12 1/4 Set excess cml ilass 'C' tail cm 5 1/2 Segment "A" "B" w/8.4#	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 casing in #/ft 17.00 17.00 i/g mud, 30min	Cmt Sx CuFt Cm 1050 2097 for D V Tool(s): 3100 454 38 nside the 95/8 Grade P 110 P 110 Sfc Csg Test psig: 2,349	t Cu Ft 1400 Coupling BUTT BUTT	% Excess 50 Body 2.85 -1.05	10.00 <u>Design Fa</u> Collapse 1.48 7.66	MASP 2843 sum of sx 1636 ctors P Burst 2 2 2 Totals:	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716
12 1/4 Set excess cml class 'C' tail cm 5 1/2 Segment "A" "B"	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 casing in #/ft 17.00 17.00 i/g mud, 30min	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110Sfc Csg Test psig:2,349nent Design Factors	t Cu Ft 1400 Coupling BUTT BUTT Would be:	% Excess 50 Body 2.85 -1.05 56.04	10.00 <u>Design Fa</u> Collapse 1.48 7.66 1.41	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 2 Totals: if it were a	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677 9,071 19,748 vertical we	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore.
12 1/4 Set excess cmi Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 casing in #/ft 17.00 17.00 i/g mud, 30min	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsannedMTD	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD	% Excess 50 Body 2.85 -1.05 56.04 Csg VD	10.00 <u>Design Fa</u> Collapse 1.48 7.66 1.41 Curve KOP	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 2 Totals: if it were a Dogleg ^o	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677 9,071 19,748 vertical we Severity°	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC
12 1/4 Set excess cml Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi	Volume 0.3132 ting Depths f t by stage % : it yld > 1.35 casing in #/ft 17.00 17.00 /g mud, 30min Segn ilot Hole Pla	Cmt SxCuFt Cm10502097for D V Tool(s):310045438anside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250	% Excess 50 Body 2.85 -1.05 56.04	10.00 <u>Design Fa</u> Collapse 1.48 7.66 1.41	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677 9,071 19,748 vertical we	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC 10577
12 1/4 Set excess cml Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi	Volume 0.3132 ting Depths f t by stage % : it yld > 1.35 casing in #/ft 17.00 17.00 /g mud, 30min Segn ilot Hole Pla	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsannedMTD	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC
12 1/4 set excess cm/ Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The	Volume 0.3132 tting Depths f t by stage % : at yld > 1.35 casing in #/ft 17.00 17.00 idot Hole Pla e cement volu	Cmt SxCuFt Cm10502097for D V Tool(s):310045438mside the9 5/8GradeP 110P 110Sfc Csg Test psig:2,349nent DesignFactorsannedMTD19748ume(s) are intended to action	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0	10.00 <u>Design Fa</u> Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su	MASP 2843 sum of sx 1636 ctors P Burst 2 2 Totals: if it were a Doglego 90 urface or a	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC 10577 overlap. Min Dist
12 1/4 Set excess cmi class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The Hole	Volume 0.3132 tting Depths f t by stage % : at yld > 1.35 casing in #/ft 17.00 17.00 t/g mud, 30min Segn ilot Hole Pla cement volu Annular	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748ume(s) are intended to ac1 Stage1 Stage	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0 1 Stage	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su Drilling	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90 urface or a Calc	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC 10577 overlap. Min Dist
12 1/4 Set excess cml Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The Hole Size 8 3/4	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 Casing in #/ft 17.00 17.00 17.00 17.00 segni ilot Hole Plate cement volut Annular Volume 0.2526	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748ume(s) are intended to ac1 Stage1 StageCmt SxCuFt Cm	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min t Cu Ft	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0 1 Stage % Excess	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su Drilling Mud Wt	MASP 2843 sum of sx 1636 Ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90 urface or a Calc	BOPE 3M Σ CuFt 3309	Hole-Cpl 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC 10577 overlap. Min Dist Hole-Cpl
12 1/4 Set excess cmi Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The Hole Size	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 Casing in #/ft 17.00 17.00 17.00 17.00 segni ilot Hole Plate cement volut Annular Volume 0.2526	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748ume(s) are intended to ac1 Stage1 StageCmt SxCuFt Cm	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min t Cu Ft	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0 1 Stage % Excess	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su Drilling Mud Wt	MASP 2843 sum of sx 1636 ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90 urface or a Calc MASP	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 \$\$\sec\$\sec\$\sec\$\sec\$\sec\$\sec\$\sec\$\se
12 1/4 Set excess cml Class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The Hole Size 8 3/4	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 Casing in #/ft 17.00 17.00 17.00 17.00 segni ilot Hole Plate cement volut Annular Volume 0.2526	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748ume(s) are intended to ac1 Stage1 StageCmt SxCuFt Cm	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min t Cu Ft	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0 1 Stage % Excess	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su Drilling Mud Wt	MASP 2843 sum of sx 1636 ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90 urface or a Calc MASP	BOPE 3M Σ CuFt 3309 RODUCTIO Length 10,677 9,071 19,748 vertical we Severity° -90 4100 Req'd BOPE	Hole-Cplg 0.81 \$\$\sec\$\sec\$\sec\$\sec\$\sec\$\sec\$\sec\$\se
12 1/4 Set excess cml class 'C' tail cm 5 1/2 Segment "A" "B" w/8.4# B No Pi The Hole Size 8 3/4	Volume 0.3132 ting Depths f t by stage % : at yld > 1.35 Casing in #/ft 17.00 17.00 17.00 17.00 segni ilot Hole Plate cement volut Annular Volume 0.2526	Cmt SxCuFt Cm10502097for D V Tool(s):310045438aside the9 5/8GradeP 110P 110P 110Sfc Csg Test psig:2,349nent DesignFactorsanned19748ume(s) are intended to ac1 Stage1 StageCmt SxCuFt Cm	t Cu Ft 1400 Coupling BUTT BUTT Would be: Max VTD 11250 hieve a top of Min t Cu Ft	% Excess 50 Body 2.85 -1.05 56.04 Csg VD 11250 0 1 Stage % Excess	10.00 Design Fa Collapse 1.48 7.66 1.41 Curve KOP 10677 ft from su Drilling Mud Wt	MASP 2843 sum of sx 1636 ctors P Burst 2 2 Totals: if it were a Dogleg ^o 90 urface or a Calc MASP	BOPE 3M Σ CuFt 3309	Hole-Cplg 0.81 Σ%excess 136 N Weight 181,509 154,207 335,716 Ilbore. MEOC 10577 overlap. Min Dist Hole-Cplg 1.35

In a Lesser Prairie-Chicken section.

Carlsbad Field Office