District 1					54-4 C B	J								
1625 N. French D Phone: (575) 393-				_		New Mexico			Fur Revised July					
District II 811 S. First St., A				Energy Minerals and Natural Resources										
Phone: (575) 748- District III					Oil Conserv	ation Divisio	n							
1900 Rio Brazos Phone: (505) 334- District IV					1220 South 8	St. Francis D								
1220 S. St. Franci Phone: (505) 476					Santa Fe,	, NM 87505								
A FATAT T	CATTO		DEEDAART		-		DI LICIDA O							
APPLI		M FOR	* Operator Name	and Address	, RE-ENTE	R, DEEPEN	, PLUGBAC	OGRID Numb	DAZONE					
			COG Opera 2208 West M	ting LLC				229137						
			Artesia, NN	1 88210			70-	025- 4	2351					
* Prop 39	erty Code 678			C	² Property Name Sprey 20 State Con	n			cil No 8H					
					Surface Locatio									
UL – Lot L	Section 20	Township 215	Range 34E	Lot Idn	Feet from 2450	N/S Line South	Feet From 280	E/W Line West	County Lea					
			Proposed B	tottom Hole I			200	west .	Lea					
UL-Loi	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County					
M	29	215	34E		330	South	380	West	Lea					
					Pool Informatio	0 n			T					
WC-025 G07 S	213430M; Bo	ne Spring		1.0	ol Name				Pool Code 97962					
				Additio	nal Well Infor	mation —								
	rk Type Well		¹² Well Type Oil	T	¹¹ Cable/Relary		14 Lease Type	¹³ Grt	ound Level Elevation					
¹⁶ M	ultiple		17 Proposed Dept	, – –	¹⁸ Formation	· · · · · · · · · · · · · · · · · · ·	State 19. Contractor	3741.5' ²⁰ Spud Date						
Depth to Grou	N Ind water		21780' Dist	ance from neares	Bone Spring at fresh water well									
X]We will be	using a clos	ed-loop syst	em in lieu of line 21		asing and Cem	ant Bragnom	I							
	Hok	e Size	Casing Size	Casing W		Setting Depth	Sacks of (Cement	Estimated TOC					
Туре			13.375	54.		1880'	120	0						
Type Surface	- I	7.5												
		2.25	9.625	4() i	5860'	145	o I						
Surface	12		9.625 5.5	4(5680					
Surface Intrad Production	12	.25	5.5 Casi	ng/Cement P	, rogram: Addit	21780' Lional Commen	350 ts	0	5680					
Surface Intrind Production Plan to drill a	12 8. 17-1/2" hol	2.25 .75 e to 1880' wi	5.5 Casil th Fresh Water. F	17 ng/Cement P Run 13-3/8", 54.5	rogram: Addit 5#, J-55 csg and cm	21780' tional Commen t to surface. Drill t2	350 15 2-1/4" hole to 5860'	0 with Brine, and ru	ın 9-5/8'', 40# J55					
Surface Intrind Production Plan to drill a	12 8. 17-1/2" hol	2.25 .75 e to 1880' wi	5.5 Casin th Fresh Water. F & curve. Drill a 8	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with	rogram: Addit i#, J-55 csg and cm 1 cut brine to appros	21780' tional Commen t to surface. Drill 12 ximately 21.780' M	350 15 2-1/4" hole to 5860'	0 with Brine, and ru	ın 9-5/8'', 40# J55					
Surface Intrind Production Plan to drill a	12 8 17-1/2" hol ace, Drilt 8	2.25 .75 e to 1880' wi	5.5 Casi th Fresh Water. F & curve. Drill a 8 22	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B	rogram: Addit 5#, J-55 csg and cm 1 cut brine to approv lowout Prevent	21780' tional Commen t to surface. Drill 12 ximately 21.780' M tion Program	350 15 1-1/4" hole to 5860' D, Run 5-1/2", 17#,	0 with Brine, and ru P-110 csg and cu	n 9-5/8", 40# J55 ment to 5680".					
Surface Intrmd Production Plan to drill a cement to surf	12 8 17-1/2" hol face. Drill 8 Type	2.25 .75 e to 1880' wi -3/4'' vertical	5.5 Casi th Fresh Water. F & curve. Drill a 8 22	17 ng/Cement P Run 13-3/8", 54. 3-3/4" lateral with Proposed B Working Pressu	rogram: Addit 5#, J-55 csg and cm 1 cut brine to approv lowout Prevent	21780 [°] tional Commen t to surface. Drill 12 ximately 21.780 [°] M tion Program Test Pres	350 Is !-1/4" hole to 5860' D. Run 5-1/2", 17#, issure	0 with Brine, and ru P-110 csg and cu	ın 9-5/8", 40# 355 ment to 5680". Invfacturer					
Surface Intrmd Production Plan to drill a cement to surf	12 8 17-1/2" hol ace, Drilt 8	2.25 .75 e to 1880' wi -3/4'' vertical	5.5 Casi th Fresh Water. F & curve. Drill a 8 22	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B	rogram: Addit 5#, J-55 csg and cm 1 cut brine to approv lowout Prevent	21780' tional Commen t to surface. Drill 12 ximately 21.780' M tion Program	350 Is !-1/4" hole to 5860' D. Run 5-1/2", 17#, issure	0 with Brine, and ru P-110 csg and cu	n 9-5/8", 40# J55 ment to 5680".					
Surface Intrind Production Plan to drill a cement to surf	12 8 17-1/2" hol face. Drill 8 Type Double Ra	2.25 .75 e to 1880' wi .3/4'' vertical	5.5 Casil th Fresh Water. F & curve. Drill a 8 22	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000	rogram: Addit 5#, J-55 csg and cm 1 cut brine to approv lowout Prevent re	21780 [•] tional Commen t to surface. Drill 12 ximately 21.780 [•] M tion Program Test Pre: 300	350 ts 2-1/4" hole to 5860' D. Run 5-1/2", 17#, isure	0 with Brine, and ru P-110 csg and cer Ma	in 9-5/8", 40# J55 ment to 5680". inulacturer Horn					
Surface Intrnd Production Plan to drill a cement to surf I 23. I hereby cc best of my kn	12 8 17-1/2" hol ace, Drill 8 Type Double Ra Double Ra	e to 1880' wi -3/4'' vertical am he informatio d belief.	5.5 Casin th Fresh Water. F & curve. Drill a 8 22 n given above is	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000 true and comple	rogram: Addit 5#, J-55 csg and cm 1 cut brine to approv lowout Prevent re	21780 [•] tional Commen t to surface. Drill 12 ximately 21.780 [•] M tion Program Test Pre: 300	350 Is !-1/4" hole to 5860' D. Run 5-1/2", 17#, issure	0 with Brine, and ru P-110 csg and cer Ma	in 9-5/8", 40# J55 ment to 5680". inulacturer Horn					
Surface Intrmd Production Plan to drill a cement to surf I 1 23. I hereby ce best of my kn I further cer 19,15.14.9 (B	12 8 17-1/2" hol face. Drill 8 Type Double Ra Double Ra Trify that the owledge an	e to 1880' wi -3/4" vertical am te informatio d belief:	5.5 Casi th Fresh Water. F & curve. Drill a 8 22 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000 true and comple	rogram: Addit #, J-55 csg and cm 1 cut brine to approv lowout Prevent re	21780 [•] tional Commen t to surface. Drill 12 ximately 21.780 [•] M tion Program Test Pre: 300	350 ts 2-1/4" hole to 5860' D. Run 5-1/2", 17#, isure	0 with Brine, and ru P-110 csg and cer Ma	in 9-5/8", 40# J55 ment to 5680". inulacturer Horn					
Surface Intrind Production Plan to drill a cement to surf I 23. 1 hereby cc best of my kn I further cer 19,15.14.9 (B Signature)	12 8 17-1/2" hol face. Drill 8 Type Double Ra Double Ra rtify that th owledge an lify that I I NMAC	2.25 75 e to 1880' wi -3/4'' vertical am be informatio d belief. save complic , if applica	5.5 Casi th Fresh Water. F & curve. Drill a 8 22 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000 true and comple	rogram: Addit #, J-55 csg and cm 1 cut brine to approv lowout Prevent re te to the: and/or App	21780' ional Commen it to surface. Drill 12 ximately 21.780' Mi tion Program Test Pres 300 OIL proyed By:	350 15 1-1/4" hole to 5860' D. Run 5-1/2", 174, ssure D CONSERVAT	0 with Brine, and ru P-110 csg and cer Ma FION DIVISI	in 9-5/8", 40# J55 ment to 5680". inulacturer Horn					
Surface Intrind Production Plan to drill a cement to surf cement to surf I an to drill a cement to surf I further cer 19.15.14.9 (B Signature)	12 8 17-1/2" hol ace. Drill 8 Type Double Rc Double Rc antify that th owledge an ulfy that 1 H NM C F Mayte R	e to 1880' wi 3/4" vertical am he informatio d belief. have complic , if applica , if applica , eyes	5.5 Casi th Fresh Water. F & curve. Drill a 8 22 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000 true and comple	rogram: Addit rogram: Addit s#, J-55 csg and cm 1 cut brine to approv lowout Prevent re te to the and/or App Title	21780' tional Commen t to surface. Drill 12 ximately 21.780' M tion Program Test Pre: 300 OIL proyeed By: e: Petroleu	350 ts 2-1/4" hole to 5860' D. Run 5-1/2", 17#, isure D CONSERVAT Im Engineen	0 with Brine, and ru P-110 csg and cer Ma	in 9-5/8", 40# J55 ment to 5680". inufacturer Horn					
Surface Intrmd Production Plan to drill a cement to surf I I best of my kn I further cer 19,15,14.9 (B	12 8 17-1/2" hol ace. Drill 8 Type Double Ra Double Ra mify that I owledge an iffy that I NMACS Mayte R atory Analy	e to 1880' wi -3/4'' vertical am he informatio d belief. have complic , if applice eyes	5.5 Casi th Fresh Water. F & curve. Drill a 8 22 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17 ng/Cement P Run 13-3/8", 54.5 1-3/4" lateral with Proposed B Working Pressu 3000 true and comple	rogram: Addit rogram: Addit s#, J-55 csg and cm 1 cut brine to approv lowout Prevent re te to the and/or App Title	21780' ional Commen it to surface. Drill 12 ximately 21.780' Mi tion Program Test Pres 300 OIL proyed By:	350 ts 2-1/4" hole to 5860' D. Run 5-1/2", 17#, isure D CONSERVAT Im Engineen	0 with Brine, and ru P-110 csg and cer Ma FION DIVISI	in 9-5/8", 40# J55 ment to 5680". inufacturer Horn					

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Osprey 20 State Com #8H

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			Sec. 17	1.1	 1.1.1	11. A.S.	1.1			 - 1 k	21 A.S.			· · · · · ·	 14 C - 1	· · · · · ·		 · · · · ·	· · · · ,		·	· · · · .	 		· · · · ·				· · · · ·		19.12

Plan to drill a 17-1/2" hole to 1880' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 5860' with Brine, and run 9-5/8", 40# J55 and cement to surface. Drill 8-3/4" vertical & curve. Drill a 8-3/4" lateral with cut brine to approximately 21,780' MD. Run 5-1/2", 17#, P-110 csg and cement to 5680'.

Well Control

Type Pressure Test Manufacture

Double Ram 3000 3000 Horn

CONDITIONS OF APPROVAL

API #	Operator	Well name & Number
30-025-42351	COG Operating LLC	Osprey 20 State Com # 8H

Applicable conditions of approval marked with XXXXXX

Administrative Orders Required

XXXXXXX	Will require a directional drill survey with the C-104
XXXXXXXX	If using a pit for drilling and completion operations, must have an approved pit form prior to spudding the well
Other wells	

Drilling

XXXXXXX	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in
	cement the water protection string

Casing

XXXXXXX	SURFACE & INTERNEMIATE(1) CASING - Cement must circulate to surface
XXXXXXX	PRODUCTION CASING - Cement must tie back into intermediate casing
XXXXXXX	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
	South Area
XXXXXXX	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water