District I

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

District II

Date: 6/5/2014

811 S. First St., Artesia, NM 88210 Phone; (575) 748-1283 Fax: (575) 748-9720

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

State of New Mexico

Form C-101 Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

HOBES OCD

1220 South St. Francis Dr.

Santa Fe, NM 87505

JUN 0 9 2014

P 2 21S 33E 190 South 600 East 1	APPLI	CATIO	N FOR			RE-ENTI	ER, DEE	PEN, PL	UGBACI	C. OR A	CEIVED ADD A ZONE	
Property Code	1. Operator Name and Address											<i>-</i>
Property Code Property Code South Property Name South Sout	COG Operating LLC 2208 West Main Street											
Property Code Ber Lifty 2 State Com 7. Surface Location 1. L. Lan 1. Section Township Range P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 336 Lot lon Feet from NS Line P 2 215 State P 2 215 336 Lot lon Feet from NS Line P 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					88210		30-025-41915					
T. Surface Location UL - Let Section Township Range Lot luin Feet from MS Line Feet From ENV Line Cr. 121S 33E 199 South Feet From ENV Line Cr. 121S 33E 199 South Feet From ENV Line Cr. 121S 33E 199 South Feet From MS Line Feet From ENV Line Cr. 121S 33E Lot luin Feet from MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From ENV Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Feet From MS Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Feet From MS Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Feet From MS Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Cr. 121S 33E North Feet From MS Line Cr. 121S 33E North Feet From MS Line Feet From MS Line Feet From MS Line Cr. 121S 37E	* Prope	rty Code 446		<u> </u>	Ben 1	Property Name Filly 2 State Co	e om	•		, v - .	" Well No	1
UL - Len Section Township Range Lot lain Feet from 199 South Feet From East 190 " Proposed Bottom Hole Location UL - Len Section Township Range Lot lain Feet from 330 North Feet From East 1 " Proposed Bottom Hole Location UL - Len Section Township Range Lot lain Feet from 330 North Feet From East Lot lain Feet From Section Township Range Lot lain Feet from 330 North Feet From East Lot lain Feet From Section Lot lain Feet From Section Lot lain Feet From Range Lot lain Range Lot lain Feet From Range Lot lain Feet From Range Lot lain Range Lot lain Feet From Range Lot lain Range Rang		770	•	ļ					<u> </u>		211	<u> </u>
"Proposed Bottom Hole Location UL- Lot Section Township Range Lot lain Feet from NiS Line Feet From EAW Line Comment of Section 1 2 21S 33E Lot lain Feet from North 600 East 1 "Pool Information Pool Name Fool Name Feet From 600 East 1 "Pool Name Fool Name Township Name Fool Name Fool Name Fool Name Fool Name Township Name Fool Name Township Name Fool Name Foo	UL - Lot	Section	Township	Range	Lot Idn	Feet from	om N/S Line		Feet From	E/W Line	e County	
Ut. Lat Section Towardup Range Lot lain Feet from N/S Line Feet From 600 East 1 **Pool Information **Pool Name Pool Name	P	2	215				South		600	East	Lea	
Pool Information Pool Name Pool Name Pool State Additional Well Information Pool Name Additional Well Information Well Type				***************************************								
Pool Name Pool Name Pool					Lot Idn				1		,	
Pool Name Pool Name Pool Name Pool Standard Pool St	,	ž	213	338	<u> </u>				600	East	Lea	
Additional Well Information "I Work Type Oil					9. Poo	l Informat	ion		···		· · · · · · · · · · · · · · · · · · ·	
Additional Well Information "I Work Type New Well Oil 19pe Oil Cable/Rotary State 3783.9" "I Multiple Disposed Depth Proposed Depth Bone Spring Octournetor State 18802" Depth to Ground water Distance from nearest fresh water well Distance to nearest surface water Depth to Ground water Distance from nearest fresh water well Distance to nearest surface water	* Dans Car										Pool Code	
" Work Type "Well Type " Cable/Rotary " Leave Type " Ground Level File New Well Oil Throposed Depth " Formation " Contractor ™ Spad Date Multiple New Well Oil Throposed Depth " Formation New Spring New Well Distance to nearest surface water Depth to Ground water Distance from nearest fresh water well Distance to nearest surface water We will be using a closed-loop system in lieu of lined pits 21. Proposed Casing and Cement Program Type Hole Size Casing Size Casing Weight/ft Setting Depth Sacks of Cement Estimated Surface 17.5 13.375 54.5 1850' 1215 Intrind 12.25 9.625 36/40 5530' 2115 Production 8.75 5.5 17 18802' 3700 Casing/Cement Program: Additional Comments Drill 17-1/2" hole to -1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TO and cement to surface in one stage. Will use 1' and Class C w/ 2% CaCl ₂ to cement to surface, if necessary. Drill 12-1/4" hole to -550' with saturated brine water. If Gosses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40#. LTC casing to TO with a DV tool placed - 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18902' with cut brine. Run 5-1/2" 17# PT10 Tenaris TXP casing to TD and cement to surface in on 2. Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service "Title: Petrolevin Engineer Approved By: 1. In applicable. Signature: Printed name: Mayte Reyes Title: Petrolevin Engineer	Berry: Bone Spring, North										5535	<u></u>
New Well Oil Proposed Depth 1 Formation 1 Contractor 2 Spud Date 18002	H-w-	• •••	- 	12. uz. 11. m.				12:3		-, ,		
Depth to Ground water Distance from nearest fresh water well Distance to nearest surface water New will be using a closed-loop system in lite of lined pits 1. Proposed Casing and Cement Program Type Hole Size Casing Size Casing Weight/ft Setting Depth Sacks of Cement Estimated Surface 17.5 Intrind 12.25 9.625 36/40 5530 2115 Production 8.75 5.5 17 18802 3700 Casing/Cement Program: Additional Comments Drill 17-1/2* hole to ~1850* w/ fresh water spud mud. Run 13-3/8* \$4.5# J55 \$TC casing to TD and cement to surface in one stage. Will use 1* and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4* hole to ~1850* w/ its saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8* 36#/40# LTC casing to TD with a DV tool placed ~100* above the Reef. Plan to circulate cement on both stages. Drill 8-3/4* vertical hole, curve and lateral to 18802* with cut brine. Run 5-1/2* 17# P110 Tenaris TXP casing to TD and cement to surface in on 2* Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 19.15.14.9 (A) NMAC □ and/or 19.15.14.9 (B) NNAC □ and/or 19.	New	New Well				" Cable/Rotary	able/Rotary				I	
Depth to Ground water Distance from nearest fresh water well Distance to nearest surface water	^{16.} Multiple							19 Contractor		Spud Date		
Type Hole Size Casing Size Casing Weight/ft Setting Depth Sacks of Cement Estimated Surface 17.5 13.375 54.5 1850' 1215 Intrmd 12.25 9.625 36/40 5530' 2115 Production 8.75 5.5 17 18802' 3700 Casing/Cement Program: Additional Comments Drill 17-1/2" hole to -1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to -5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40# LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in one 2º Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 19.15.14.9 (8) NMAC A if applicable. Signature: Approved By: Title: Petrolevan Engineer							£		Distance to	o nearest su		
Type Hole Size Casing Size Casing Weight/ft Setting Depth Sacks of Cement Estimated Surface 17.5 13.375 54.5 1850' 1215 Intrind 12.25 9.625 36/40 5530' 2115 Production 8.75 5.5 17 18802' 3700 Casing/Cement Program: Additional Comments Drill 17-1/2" hole to ~1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/ 2% CaClz to cement to surface, if necessary. Drill 12-1/4" hole to ~5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40# LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in one 2º Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Services of my knowledge and belief. If further certify that the information given above is true and complete to the best of my knowledge and belief. If further certify that I have complied with 19.15.14.9 (A) NMAC I and/or 19.15.14.9 (B) NMAC I if applicable. Signature: Printed name: Mayte Reyes Title: PetroTextin Engineer	₩e will be t	sing a clos	ed-loop sys					**.	<u> </u>			
Surface 17.5 13.375 54.5 1850' 1215 Intrind 12.25 9.625 36/40 5530' 2115 Production 8.75 5.5 17 18802' 3700 Casing/Cement Program: Additional Comments Drill 17-1/2" hole to -1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to -5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40#. LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 22 Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 19.15.14.9 (B) NN1AC Signature: OIL CONSERVATION DIVISION Approved By: 1-1-1/2" 17# P110 Tenaris TXP Casing to TD and cement to surface in one 22 Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 19.15.14.9 (B) NN1AC Signature: P1.5.14.9 (B) NN1AC			<u> </u>	31	Proposed Casi	ing and Ce	ment Progr	am			T	
Intriid 12.25 9.625 36/40 5530' 2115 Production 8.75 5.5 17 18802' 3700 Casing/Cement Program: Additional Comments Drill 17-1/2" hole to −1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to −5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40#. LTC casing to TD with a DV tool placed − 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 22 Proposed Blowout Prevention Program Type: Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 1 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: Title: Petrolleum Engineer Title: Petrolleum Engineer	Туре	Hole	Size	Casing Size	Casing Weight/ft		Setting Depth		Sacks of Cement		ent Estimated TOC	
Casing/Cement Program: Additional Comments Drill 17-1/2" hole to -1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to -5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40#. LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 19802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 22 Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. 14 I hereby certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NNIAC if applicable. Signature: Printed name: Mayte Reyes Title: Petroleván Engineer	Surface	17.5		13.375 54.5			1850'		1215			
Casing/Cement Program: Additional Comments Drill 17-1/2" hole to ~1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1' and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to ~5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40# LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 2" Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 1" I hereby certify that the information given above is true and complete to the best of my knowledge and betief. I further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NNIAC A, if applicable. Signature: Printed name: Mayte Reyes Title: Petroleum Engineer	Intrnid	12	.25	9.625	36/40		5530°		2115			
Drill 17-1/2" hole to ~1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1 and Class C w/ 2% CaCl₂ to cement to surface, if necessary. Drill 12-1/4" hole to ~5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40# LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 2" Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 1 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC if applicable. Signature: Printed name: Mayte Reyes Title: Petroleum Engineer	Production	Production 8,7		5.5	17		18802		3700			
Drill 17-1/2" hole to ~1850' w/ fresh water spud mud. Run 13-3/8" 54.5# J55 STC casing to TD and cement to surface in one stage. Will use 1 and Class C w/ 2% CaCl ₂ to cement to surface, if necessary. Drill 12-1/4" hole to ~5530' with saturated brine water. If losses occur in the Reef, will switch to fresh water to interval TD. Run 9-5/8" 36#/40# LTC casing to TD with a DV tool placed ~ 100' above the Reef. Plan to circulate cement on both stages. Drill 8-3/4" vertical hole, curve and lateral to 18802' with cut brine. Run 5-1/2" 17# P110 Tenaris TXP casing to TD and cement to surface in on 2" Proposed Blowout Prevention Program Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service Double Ram 3000 GIL CONSERVATION DIVISION I further certify that the information given above is true and complete to the best of my knowledge and belief. Further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC if applicable. Signature: Petroleum Engineer Title: Petroleum Engineer		<u></u>		Casin	g/Cement Pro	gram: Add	itional Con	nments			<u> </u>	····
Type Working Pressure Test Pressure Manufacturer Double Ram 3000 3000 T3 Energy Service 1 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 \(\omega\) and/or 19.15.14.9 (B) NMAC \(\omega\), if applicable. Signature: Printed name: Mayte Reyes Title: Petroleum Engineer	and Class C Drill 12-1/4" I LTC casing t	w/ 2% Ca nole to ~5! o TD with	Cl₂ to cerr 530' with s a DV tool	sh water spud mu tent to surface, if r aturated brine wat placed ~ 100' abo d lateral to 18802'	d. Run 13-3/8" 5 necessary. ter. If losses occ ove the Reef. Pla ' with cut brine.	54.5# J55 ST cur in the Rec an to circulate Run 5-1/2" 1	C casing to 1 ef, will switch e cement on 7# P110 Ten	TD and cem to fresh wa both stages aris TXP ca	ter to interval	TD. Run !	9-5/8" 36#/40# J55/L	.80
Double Ram 3000 3000 T3 Energy Service 1 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 \(\text{ and/or 19.15.14.9 (B) NMAC } \(\text{ if applicable.} \) Printed name: Mayte Reyes Title: Petroleum Engineer				22]	Proposed Blow	vout Prever	ntion Progr	am		······		
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 \(\sigma\) and/or 19.15.14.9 (B) NNIAC \(\sigma\), if applicable. Signature: Printed name: Mayte Reyes Title: OIL CONSERVATION DIVISION Approved By: Petroleum Engineer				"	Working Pressure		Test Pressure				Manufacturer	
best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC \(\text{ and/or} \) 19.15.14.9 (B) NNIAC \(\text{ applicable.} \) Signature: Printed name: Mayte Reyes Title: Petroleum Engineer	Double Ram				3000		3000			Т3	Energy Services	
, , , , , , , , , , , , , , , , , , ,	best of my kno I further cert 19.15.14.9 (B Signature:	wledge and ify that I had NMIAC	d belief. nave compl d, if applie	ied with 19.15.14.9		and/or Ap	Ped	<i></i>	Com	ION DIV	VISION	
	a jest a la la la jest a j	Title: Regulatory Analyst						2//	7 1	-i-rion Dat	- 1/1/1/	,
Title: Regulatory Analyst Approved Date: 06/16/14 Expiration Date: 06/16 E-mail Address: nureyes1@concho.com		7 7 7 7 7 7					proveu Date.	[10][2// /- 1 5/1	piration Du	te VOJIOJIO)

Phone: 575-748-6945

Conditions of Approval Attached