DATE IN 7/23/15 SUSPENSE

ENGINEER MAM

DHC

APP NO 15A61520528

ABOVE THIS LINE FOR DIVISION USE ONLY

#### NEW MEXICO OIL CONSERVATION DIVISION

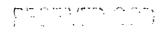
- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



#### **ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Application Acronyms:
[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]
[1] TYPE OF APPLICATION - Check Those Which Apply for [A] Conoca Phillips [A] Location - Spacing Unit - Simultaneous Dedication Lett. Bit # 6 #5/, 52,53,3
Check One Only for [B] or [C]
IDI C. I. C. Maria
X DHC CTB PLC PC OLS OLM Pool Weil: bline
[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery + 3  WFX PMX SWD IPI EOR PPR  #:63780  [D] Other: Specify + 3
[D] Other: Specify
+3
[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply  [A] Working, Royalty or Overriding Royalty Interest Owners
<u> </u>
[B] X Offset Operators, Leaseholders or Surface Owner
[C] Application is One Which Requires Published Legal Notice
[D] X Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[E] For all of the above, Proof of Notification or Publication is Attached, and/or,
[F] Waivers are Attached
[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.
[4] <b>CERTIFICATION:</b> I hereby certify that the information submitted with this application for administrative approval is <b>accurate</b> and <b>complete</b> to the best of my knowledge. I also understand that <b>no action</b> will be taken on this application until the required information and notifications are submitted to the Division.
Note: Statement must be completed by an individual with managerial and/or supervisory capacity.
Ashley Bergen Regulatory Specialist Regulatory Specialist
Print or Type Name Signature Title Date
ashley.bergen@conocophillips.com e-mail Address





ConocoPhillips Company P.O. Box 51810 Midland, TX 79710-1810

July 20, 2015

State of New Mexico Oil Conservation Division Attn: 1220 South Saint Francis Drive Santa Fe, New Mexico 87505

Look phistoproAlt

SUBJECT: REQUEST FOR APPROVAL OF DOWNHOLE COMMINGLE FOR BRITT B LEASE

#### To Whom It May Concern:

ConocoPhillips Company respectfully requests an approval of our plans to Downhole Commingle the Skaggs-Glorieta Pool (57190) with the pre-approved pools Weir-Blinebry (63780), Weir-Blinebry East (63800), Monument-Tubb (47090), and Skaggs-Drinkard (57000) pools in ConocoPhillips' Blinebry, Tubb, Drinkard development program in Sections 10 and 15, T20S, R37E, Lea County, New Mexico.

Enclosed are the following documents in support of this request.

- Administrative Application Checklist
- Copy of the New Mexico Form C-107A (with attachments)
- Copy of letter sent to spacing unit interest owners.

A copy of this letter is being sent to Bureau of Land Management, Carlsbad Field Office. Notification is being provided by separate letter to interest owners in the spacing unit (as per NMAC 19.15.12) via certified return receipt.

If you have any questions regarding this request, I can be reached at 432-688-6938 or via email at ashley.bergen@cop.com

Sincerely,

Ashley Bergen

Regulatory Specialist

District I 1625 N. French Drive, Hobbs, NM 88240 District II 8)1 S. First St., Artesia, NM 88210

District III 1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Form C-107A Revised August 1, 2011

APPLICATION TYPE

	AFFEIGATION LIFE
X	Single Well
	Establish Pre-Approved Pools
	EXISTING WELLBORE

#### APPLICATION FOR DOWNHOLE COMMINGLING

\_\_\_Yes 🔀 No

ConocoPhillips Company		D. Box 51810 Midland, TX 79710 fress	)	
Operator				
Britt B Lease	52 I-10- 20 Well No. Unit Letter-	S- 37E Section-Township-Range	Lea County	
OGRID No. 217817 Property Co	de_31365 API No. <u>30-025</u>	5- Lease Type: X	FederalStateFee	
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE	
Pool Name	Skaggs Glorieta	Weir-Blinebry	Mounument Tunn	
Pool Code	57190	63780	47090	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	~5228'-5361' TVD	~5696'-6396' TVD	~6396'-6704' TVD	
Method of Production (Flowing or Artificial Lift)	Artifical Lift	Artifical Lift	Artifical Lift	
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	2555	2440	2150	
Oil Gravity or Gas BTU • (Degree API or Gas BTU)	~2555	~2440	~2150	
Producing, Shut-In or New Zone	New Zone	New Zone	New Zone	
Date and Oil/Gas/Water Rates of	New Zorie	INEW ZOILE	New Zone	
Last Production. (Note: For new zones with no production history.	Date:	Date:	Date:	
applicant shall be required to attach production estimates and supporting data.)	Rates: TBD	ates: TBD Rates: TBD		
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas	
than current or past production, supporting data or explanation will be required.)	TBD % TBD %	TBD% TBD%	TBD% TBD%	
	ADDITION	NAL DATA		
Are all working, royalty and overriding If not, have all working, royalty and over			YesNoNo	
Are all produced fluids from all commi	ngled zones compatible with each o	other?	Yes X No	
Will commingling decrease the value o	f production?		Yes NoX	
If this well is on, or communitized with or the United States Bureau of Land Ma			Yes_XNo	
NMOCD Reference Case No. applicable	le to this well:		_	
	at least one year. (If not available, ry, estimated production rates and s	attach explanation.) upporting data. r uncommon interest cases.	·	

District 1 1625 N. French Drive, Hobbs, NM 88240

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#### State of New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE

X\_Single Well

Establish Pre-Approved Pools EXISTING WELLBORE

Form C-107A

Revised August 1, 2011

\_\_\_Yes \_x\_No

#### APPLICATION FOR DOWNHOLE COMMINGLING

ConocoPhillips Company					310 Midland, TX	79710	i		
Operator			Ado	lress					
Britt B	52 Well No.	l- l	10-20	S- 37E	nship-Range		L	ea County	
					-				
OGRID No. <u>217817</u> Property Co	de 31365	API No. <u>.</u>	30-025	5- ·	Lease Ty	pe: <u>X</u>	Federal	_State _	Fee
DATA ELEMENT	UPP	ER ZONE		INTE	RMEDIATE ZO	ONE	Low	ER ZON	NE .
Pool Name							Skaggs Drink	ard	
Pool Code							57000		
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)							~6704'-6998'	TVD	
Method of Production (Flowing or Artificial Lift)						•	Artifical Lift		
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the					- 11 - 181				
depth of the top perforation in the upper zone)							~2100		
Oil Gravity or Gas BTU (Degree API or Gas BTU)					,		~39		
Producing, Shut-In or New Zone							New Zone	****	1888 1811
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history.	Date:			Date:	•	1	Date:		
applicant shall be required to attach production estimates and supporting data.)	Rates:			Rates:			Rates: TBD		
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil	Gas		Oil	Gas		Oil	Gas	
than current or past production, supporting data or explanation will be required.)		%	%		%	%	TBD <sup>%</sup>	5	TBD <sup>‰</sup>
		ADD	ITIO	NAL DAT	<u>'A</u>	-		•	
Are all working, royalty and overriding If not, have all working, royalty and ov							Yes_ Yes_	<u>×</u> 1	No
Are all produced fluids from all commi	ngled zones co	mpatible with	each c	ther?			Yes_	_ <u>X</u> 1	No
Will commingling decrease the value o	f production?						Yes_	1	No <u>X</u>
If this well is on, or communitized with or the United States Bureau of Land Ma						nds	Yes_	<u>X</u> 1	No
NMOCD Reference Case No. applicab	le to this well:				,,,		_		
Attachments:  C-102 for each zone to be comming Production curve for each zone for For zones with no production histor Data to support allocation method (Notification list of working, royalty Any additional statements, data or	at least one ye ry, estimated p or formula. and overridin	ar. (If not ava roduction rate. g royalty inter	ilable, s and s ests for	attach explanded attach	anation.) ata.				

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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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
Phone: (505) 476-3460 Fax: (505) 476-3462

## 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

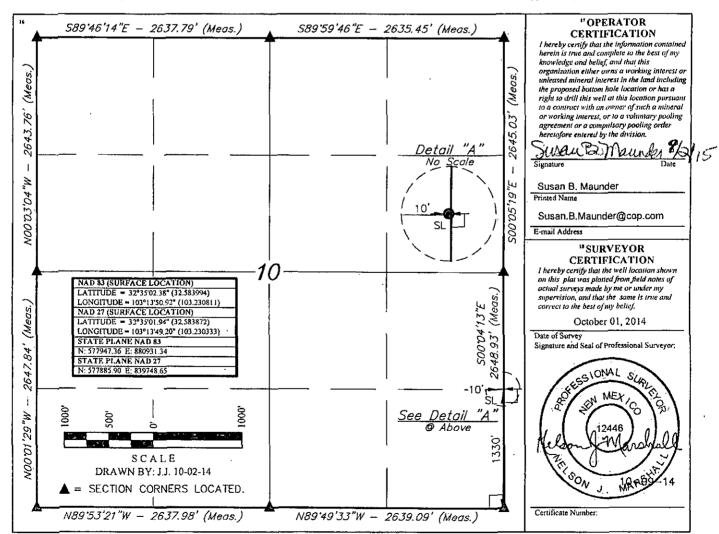
1 API Number	<sup>1</sup> Post Code	) Pool Nan	10
30-025-	57190	Skaggs; Glorleta	
1 Property Code	<sup>3</sup> Pro	6 Well Number	
31365	BR	52	
<sup>7</sup> OGRID No.		rator Name	<sup>9</sup> Elevation
217817		Phillips Company	3591.7 <sup>4</sup>

#### "Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Соилту
I	10	208	37E		1330	SOUTH	10	EAST	LEA

#### "Bottom Hole Location If Different From Surface

	UL or let no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
										1	
- 1	12 Dedicated Acre	12 Dedicated Acres 13 Joint or Infill		14 Consc	lidation Code	15 Order No.					
- 1	40			1		NSI	pending; DHC-per	nding			



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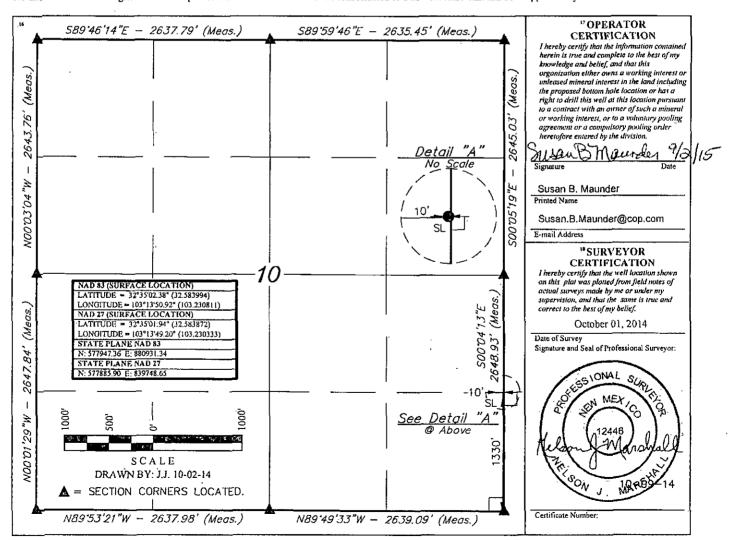
## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

. Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-	API Number			<sup>2</sup> Pool Code 3780		<sup>3</sup> Pool Name Weir; Blinebry					
Property Code 31365			•			Well Number     52					
70GRID1 217817	io.					* Elevation 3591.7'					
					"Surface	Location		-			
I, or lot no.	Section 10	Township 20S	Range 37E	Lot Idn	Feet from the 1330	North/South line SOUTH	Feet from the	East/West line EAST	County LEA		
			11	Bottom H	ole Location I	f Different From	surface		<del></del>		
L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
Dedicated Acres 11 Joint c		oint or Infili	N Conso	lidation Code	<sup>15</sup> Order No. NSL	15 Order No. NSL-pending; DHC-pending					



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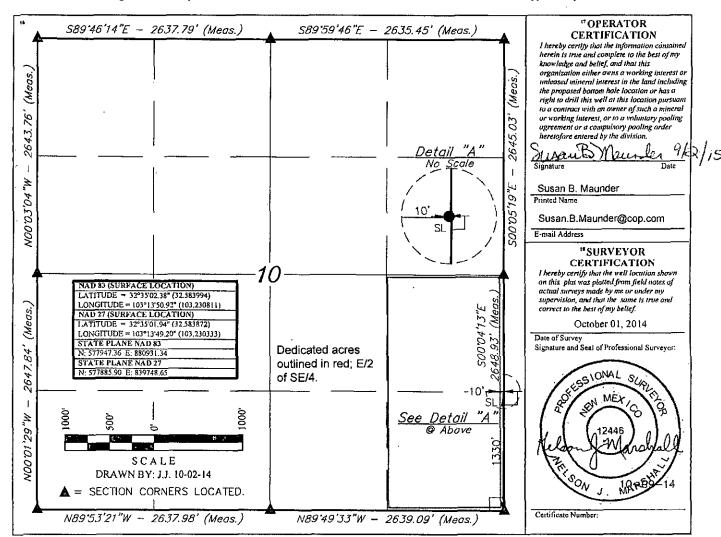
# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025	API Number -		4	<sup>3</sup> Pool Code 17090		Monument; T	ubb 3 Pool N	ime		
4 Property ( 31365	Code					4 Well Number 52				
<sup>7</sup> OGRID I 217817	Yo.		Operator Name ConocoPhillips Company						<sup>9</sup> Elevation 3591.7'	
					*Surface	Location				
UL or lot no. I	Section 10	Township 20S	Range 37E	Lot Idn	Feet from the 1330	North/South line SOUTH	Feet from the	East/West line EAST	County LEA	



District 1 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 811 S. First St. Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

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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

M AMENDED REPORT

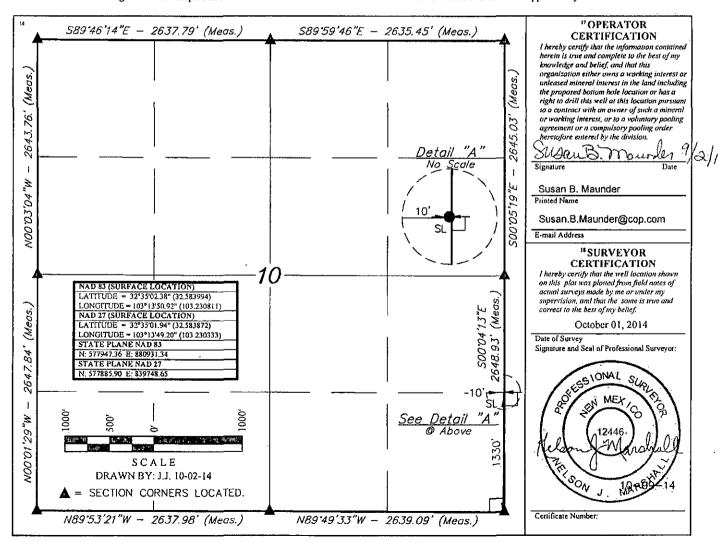
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code						
30-025-	57000	Skaggs; Drinkard					
1 Property Code	³ Pr	operty Name	6 Well Number				
31365	B	BRITT B					
7 OGRID No.	1 Of	erator Name	Flevation 5				
217817	Conocc	Phillips Company	3591.7'				

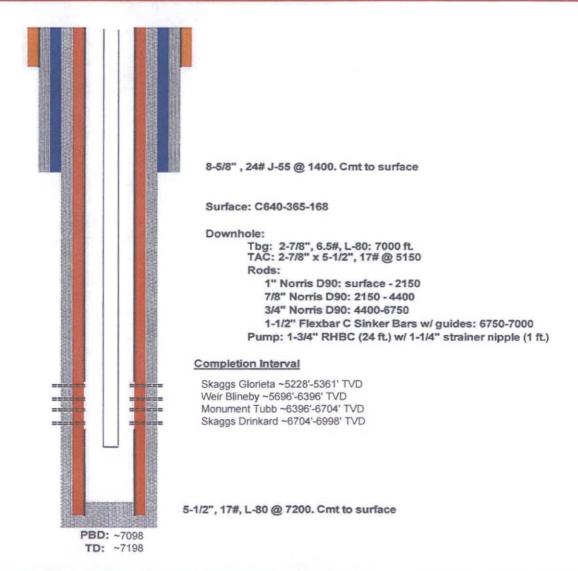
"Surface Location

UL or lot no.	Section 10	Township 20S	Range 37E	Lot Idn	Feet from the 1330	North/South line SOUTH	Feet from the 10	East/West line EAST	County LEA	ļ
<del></del>	.,,		ti	Bottom H	ole Location I	f Different From	Surface			

UL or lot no.	Section	Township	Range	Lot Idn	F	ect from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acre 40	ı <b>5</b> 13 j	loint or Infill	14 Const	olidation Code		<sup>15</sup> Order No. NSI	-pending; DHC-per			



## **Britt B 52 Proposed Well Schematic: Production Well**



## Skaggs-Glorieta Pool Commingling with Weir-Blinebry (or Weir-Blinebry East), Monument-Tubb, and Skaggs-Drinkard Pools

Britt-B Acreage Field Study and Preliminary Results

#### Summary

ConocoPhillips is proposing to commingle the Skaggs-Glorieta pool with the three preapproved pools, i.e., Weir-Blinebry (or Weir-Blinebry East) pool, Monument-Tubb pool, and Skaggs-Drinkard pool as a part of ConocoPhillips' Blinebry, Tubb, and Drinkard (BTD) development program in Sections 10, 11, and 15, T20S, R37E, Lea County, New Mexico. The working, net revenue, and royalty interests are the same for all pools within the lease being proposed for this commingle. The fluids from all zones are compatible. The allocation will be determined through down-hole production allocation tests after completion.

#### **Purpose**

ConocoPhillips requests to commingle the Skaggs-Glorieta ("Glorieta") with the three pre-approved pools, i.e., Weir-Blinebry (or Weir-Blinebry East) pool, Monument-Tubb pool, and Skaggs-Drinkard pools, in SW/4 NW/4 and S1/2 Section 10, W1/2 SW1/4 Section 11, and W/2 and W/2 E/2 Section 15, T20S-R37E in order to access reserves that would otherwise be stranded. Development of the Blinebry, Tubb, and Drinkard (BTD) is not competitively economic as initial production rates and recoveries are low. The commingling of these pools is expected to enhance production and boost ultimate recovery from the field. This will result in increased revenue for royalty interests and lease holder.

With commingling, the total recoverable resource in COP's Britt-B lease is estimated to be ~5.8 MMBO and 11.3 BCFG or an incremental 165 MBO and 324 MMCF per well, for up to 35 potential 40-acre and 20-acre spaced wells in the Britt-B lease. Our 2017 development plan targeting the Glorieta plus BTD includes the Britt B 51, Britt B 52, Britt B 53, Britt B 54, and Britt B 55 proposed wells.

#### History

ConocoPhillips operates the Britt-B lease in Sections 10, 11, and 15, T20S R37E. This lease has produced from the BTD since the 1960's. Historically, the BTD has been successful in this area with high Initial Production (IP) and long production lives. However, as reservoir pressure declines and the reserves move into lower reservoir quality areas, the BTD pool is becoming uncompetitive and uneconomic. A review of a nearby drilling program meant to produce the BTD pools suggests that the production from the two zones (Glorieta and BTD) needs to be commingled to have more favorable economics, especially in the current economic environment.

The same formation, Blinebry is called by Weir-Blinebry pool or Weir-Blinebry East pool, depending only on surface location.

The Glorieta started to be commingled with the BTD as early as 1979 in the Britt-B #26 (See Figure 1). It showed some uplift potential. For example, the Glorieta in the Britt-B #13 was discovered to have potential to produce at high rates. The high rate was again repeated in 1998 in the Britt-B #34, with exclusive Glorieta production. The Glorieta, however, hasn't shown consistent results and is considered uneconomic by itself. Therefore, in conjunction with modern completion methods, the commingling of the Glorieta and Blinebry, Tubb, and Drinkard pools in the ConocoPhillips Britt-B lease will allow both of these reserves to be produced economically and at low risk. If this pilot project is successful it will prove the viability of further downhole commingling in future wells. This would also allow recompletions into the Glorieta to be commingled with historical BTD production.

#### Reservoir Details

The Glorieta and BTD are substantially similar in characteristics to make them compatible for downhole commingling. Oil gravity comparisons between the Glorieta, Blinebry, Tubb, and Drinkard reservoirs indicate that the type of oil found in these reservoirs is similar; approximately 39 degrees API according to the Britt-B #34 and SEMU #174 production analyses.

The upper Blinebry, Tubb, and Drinkard are the better reservoir quality areas of the Yeso group formations. The Drinkard tends to be more water saturated than the other formations, while the Tubb tends to be gassier than the other two. The reservoir productive quality is striated with low permeability areas. There is a lot of gross interval to net pay in the Yeso group reservoirs (see Figure 2).

The Glorieta is a higher porosity-permeability reservoir, usually with good oil saturation (see Figure 3). There is a risk of water production due to its proximity with the water saturated Paddock formation below it. A cross section is included in Figure 4.

The pore pressure gradients for the Glorieta and BTD are expected to be similar (~0.40 psi/ft). The BTD is expected to be normally pressured to slightly under-pressured due to historical production. If there is cross-flow between the two zones due to a high fluid level or over-pressured zone, it is expected that production will be recovered once the fluid level is pumped back down or the pressure stabilizes between the two zones.

Production is expected to vary widely among the layers. There will be a total of four layers spreading approximately 1,800 feet apart. The majority of the water is expected to come from the lowest and highest zones (Drinkard and Glorieta). The majority of the gas is expected to come from the middle two layers (Blinebry and Tubb). This, however, is speculation based on a study done in the Warren Unit. The production test and production profile will be useful in confirming this along with the Glorieta production. Appendix A includes the economics for BTD production which is requested to be kept confidential.

#### **Allocation Method**

The production allocation method for all zones will be based on a cumulative zone production test (subtraction method) carried out post completion. This will be done the following way:

The Blinebry-Tubb-Drinkard zone will be completed and production tested for a minimum of 45 days. Afterwards, the Blinebry-Tubb-Drinkard will be isolated by a retrievable bridge plug positioned above the Blinebry completion. The Glorieta will be completed and production tested for a minimum 45 days. Afterwards, following the removal of the retrievable bridge plug, the well will be placed on production from the Glorieta & Blinebry-Tubb-Drinkard with production allocation (oil, gas & water) based on:

<u>Glorieta Allocation</u>: Glorieta well test volumes / (Glorieta well test volumes + Blinebry-Tubb-Drinkard well test volumes)

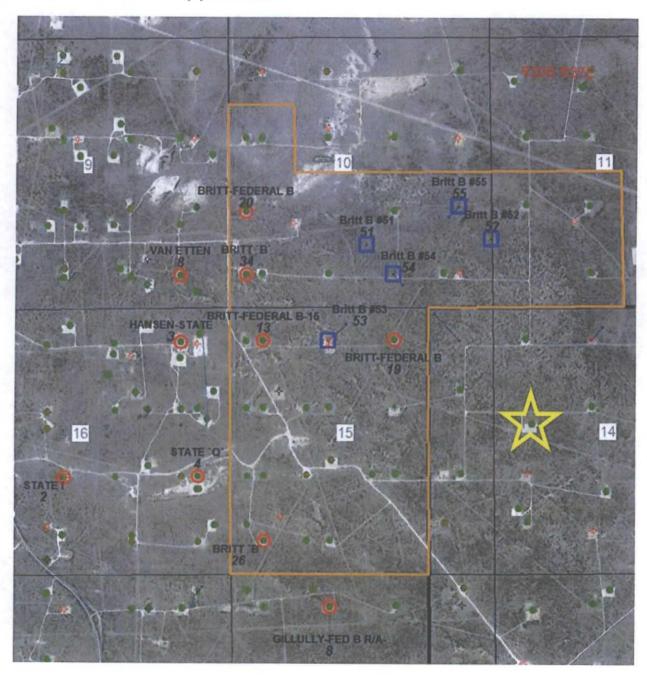
<u>Blinebry-Tubb-Drinkard Allocation</u>: Drinkard well test volumes / (Glorieta well test volumes + Blinebry-Tubb-Drinkard well test volumes)

Our proposal includes production tests on the first two or three wells, depending on initial results.

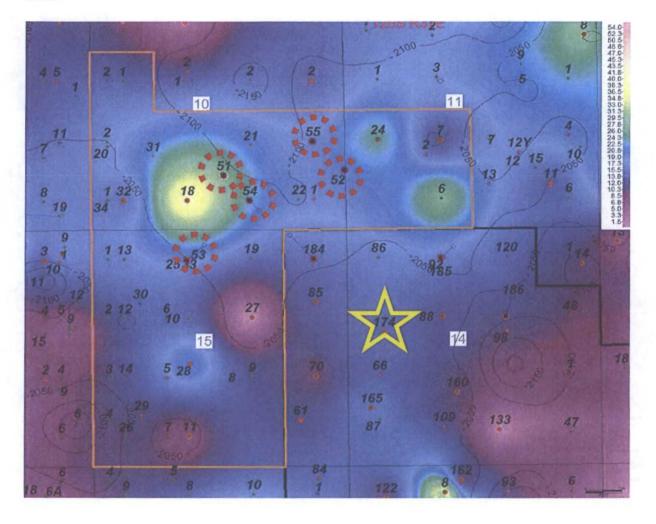
Based on our review of historical production, the expected allocation for new drill wells is 36% from the Glorieta and 64% from the BTD, according to the estimated first year production average on BOE basis.

### **Preliminary Supporting Details**

**Figure 1:** Map of all wells used in the Glorieta forecast, which are circled in red. Note that the wells outlined by blue squares are the proposed new drills and the BTD type curve well is indicated by yellow star.



**Figure 2:** Blinebry/Tubb/Drinkard reservoir quality (SoPhiH) map. The wells with red circles are the proposed Britt-B wells, and the one with yellow Star is SEMU 174 type-well.



**Figure 3:** Glorieta reservoir quality (SoPhiH) map. The wells with red circles are the proposed Britt-B wells.

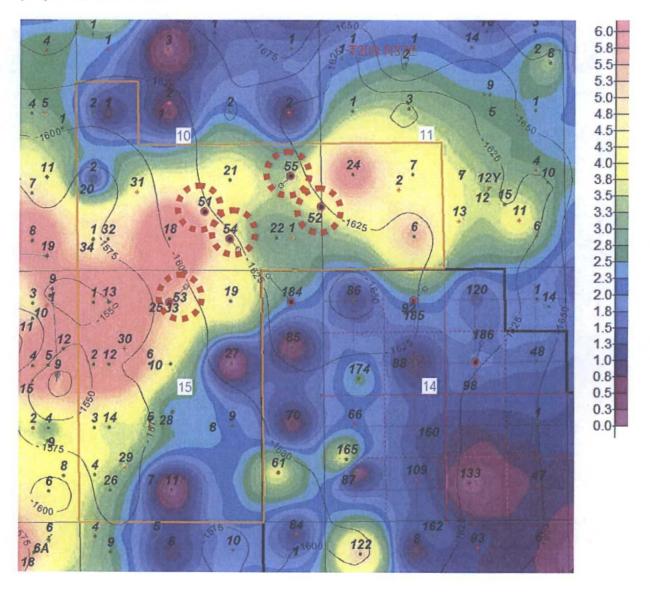
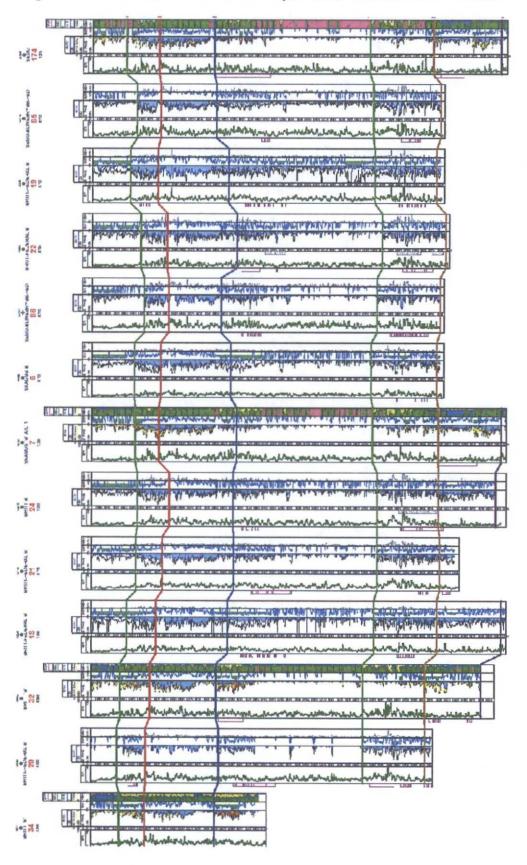


Figure 4: Glorieta, Paddock, Blinebry, Tubb, Drinkard cross-section



## Appendix A

 Table 1: Blinebry/Tubb/Drinkard standalone economics

		Inputs						Outpu	ts	
		<u>-</u> ,	i			Discount	Pretax	After Tax		After Tax
Start Da	ate:	1/1/2015	Capital	\$1,800		Rate	NPV	N₽V	Pretax IRR	IPR
H						Hare	[MS]	[M\$]		IKK
Workin	ginterest	5.0%	Tax Rate	35%		0%	(622)	(937)	-9%	-15%
Net Rev	Interest	43.8%	Gas Tax	7.5%		8%	(803)	[1,015]		
Oil Pric	e [\$/bbli	\$50	OilTax	4.6%		1:036	[827]			
Gas Pri	ce [\$/mcf]	\$3.00	Ad Val Rate	2%		12%	[845]			
OpEx I\$		\$7				15%	(854)	[1,025]	A	
<u> </u>	, 221,					2.575	10077	12,02.01		
	Gross P	reduction	<u> </u>	Net Produ	etion		P	rice /	Revenue	1
	Oil	Gas		Oil	Gas		Oil	Gas/,	🛰 SM 🗅	V.
	MBbls	MMzf	_	MBbls	MM:F		\$/661	\$/Mef (	/ /Total 🔪	*
2015	11.6	65.4	-	5.1	29.0	-	50.0	2 3.01	// 340-/	
2016	2.2	50.4		3.8	22.1		50.0`	₹`3.0	258	
2017	5.9	34.1		2.6	14.9		/50.0	` <b>`</b> 3.ŏ`.	175	
2018	4.4	25.0		1.9	10.9		500	3.0	128	
2019	3.4	19.3		15	8.5		50.0	3.0	99	
2020	2.7	15.5		1.2	6.8		50.0	3.0	BO	
2021	2.2	12.8		1.0	5.6		50.0	3.0	€6	
2022	1.9	10.8		0.8	4.7	17	·50.0	3.0	55	
2023	1.6	9.2		0.7	4.0	- /^\} (	500	3.0	47	
•	1.4					1.1		•		
2024		8.0		0.6	3.5	The state of the s	√50.0°	3.0	41	
2025	1.2	7,0		0.5	3.1	San San	50.0	3.0	36	
2026	1.1	6.3		0.5	2.7	シノベー	.50.0	3.0	32	
2027	1.0	5.6		0.4,^\	<b>- 25</b> 5	11	50.0	3.0	29	
2028	0.9	5.1		0.4	<b>₹</b> 22	くフル	50.0	3.0	26	
2029	8.0	4.6		0.4	2.0.	. /	50.0	3.0	24	
Total	54.3	311.4	·=-···	23.7 ./~	<b>136.2</b>	· -			1,596	
<u> </u>	- <u> </u>			- / - (	<u> </u>	·				
			$\sim$ $\sim$	$\mathcal{N} \mathcal{N}$	JM				Cum Ca	sh Flow
	Prod Tax		Operating.	Operating CF	المسيد	Рие Так	Taxes	After Tax	Pre Tax	After Tax
	[M\$] A	d Val Tax [M\$]	Costs [MS]	IMSI .	ČapEx	CF [M\$]	[M\$]	CF [M\$]	[M\$]	[M\$]
2015	18	7	36,~	279	1,800	-1,521	<b>"</b> 0	-1521	-1521	-1521
2016	<b>£</b> 4	5	<b>/~27</b> , \	`21,2	0	212	74	138	-1309	-1383
2017	9	3	f -19 📞	143	0	143	<b>5</b> 0	93	-11 <del>6</del> 6	-1290
2015	7	3 /	14	105	0	105	<b>*</b> 37	68	-1061	-1222
2019	5	2	111	<sup>)</sup> &1.	6	Bi	- 28	53	<del>-9</del> 79	-1169
2020	4	2 _ ``	8 7	65	0	65	F 23	42	-914	-1126
2025	4	1	$\langle \hat{z} \rangle$	54	0	54	19	35	-860	-1091
2022	3	11/	`\ `6"	45	0	45	16	29	-815	-1062
2023	3	3 1 3	) 5	39	O	39	14	25	-776	-1037
2024	2	<u> </u>	j 4	34	0	34	12	22	-742	-1015
2025	12,-7	1. 10	4	30	0	30	<b>5</b> 10	19	-713	-996
2026	/2/	1	3	25	ō	26	7 9	17	-686	-978
2027	{ · 2',	₹ i	3	24	Ö	24	r é	15	-663	963
2028	12.	) <del>1</del>	3	21	0	21	7 7	14	-641	-949
2029	E. Language	ئىز كىس	2	<b>1</b> 9	Ö	19	r ,	13	-622	-949 -937
Total	<b>B5</b>	<u>32</u>	170	1,309	1,800	-491	361	-85 i	-044	-92/
10121		- 3£	710	4,505	r,cuu	-43 L	30 I	-0-1 T	··	
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#### **Preliminary Field Study Results**

The last drilling program in this part of SEMU that targeted the Blinebry, Tubb, and Drinkard was generally uneconomic, with the exception being SEMU 174 that had an IP of 48 BOPD and 273 MCFD. This will add an incremental 55 MBO and 310 MMCF per well. The gas curve is based on a GOR of ~5.7 MCF/STB (see Figures 5 and 6).

SEMU 174 had the best reservoir quality compared to the other wells in its program, as shown by logs. The Britt-B area tends to be of higher or comparable reservoir quality to SEMU 174. For this reason in conjunction of a modern completion design, the Blinebry/Tubb/Drinkard type-curve was chosen to be based on the performance of SEMU 174. The 40-acre Original Oil In Place (OOIP) for the Blinebry/Tubb/Drinkard in the Britt-B lease was calculated to be 3.3 MBO.

#### **Justification for Commingle Proposal**

At current commodity prices, the estimated production (type curve) from the BTD in these wells is not sufficient to pay off the costs of a drilling program to this depth. With some successes being shown in the offsetting wells, in regards to producing the Glorieta and downhole commingling it with the Blinebry/Tubb/Drinkard, an uplift of 45 BOPD and 6 MCFD in the IP rate is expected (Figure 7). This will add an incremental 110 MBO and 14 MMCF per well.

The production curve is based on the production from wells inside and immediately surrounding the Britt-B lease (see Figure 1). The oil curve is based on an average of the IP rates and the decline rates of the wells. The gas curve is based on a GOR of 0.13 MCF/STB taken from the Britt-B #34, the only Glorieta only producer in the lease.

The reservoir quality for the Glorieta in the Britt-B area is comparable to the offsetting Glorieta producers. The P50<sup>‡</sup> 40-acre OOIP for the Glorieta producers was found to be ~1.1MMBO; there is confidence that the Glorieta will be a major production contributor. For convenience we include the BLM Downhole Commingle Worksheet.

<sup>&</sup>lt;sup>‡</sup> P50 refers to an estimate with 50% certainty.

### **Supporting Details**

Figure 5: Weir-Blinebry/Weir-Blinebry East/Monument-Tubb/Skaggs-Drinkard type curve

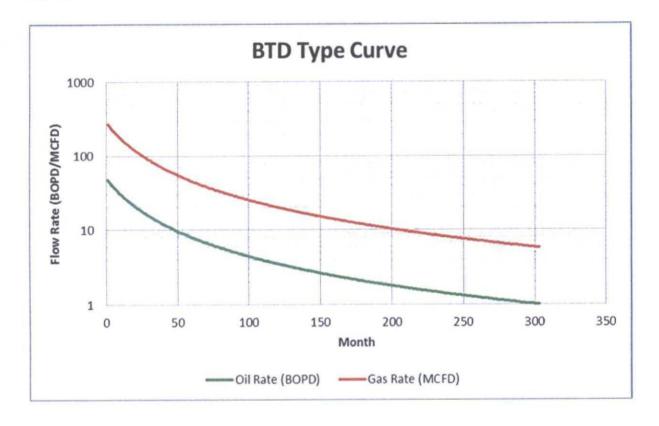


Figure 6: Type curve with SEMU 174 actual well test data

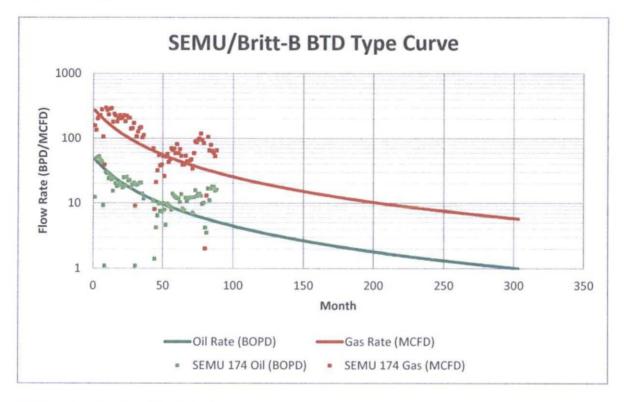


Figure 7: Skaggs-Glorieta type curve.

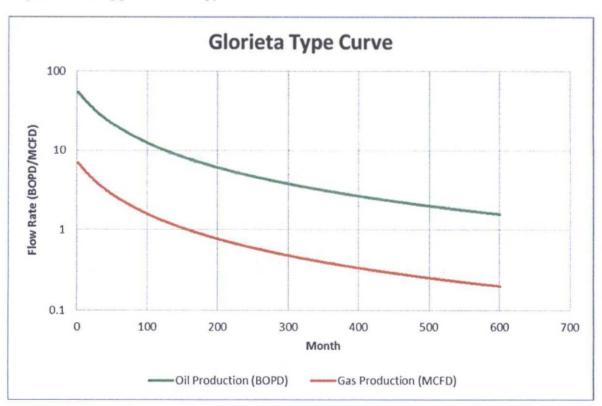
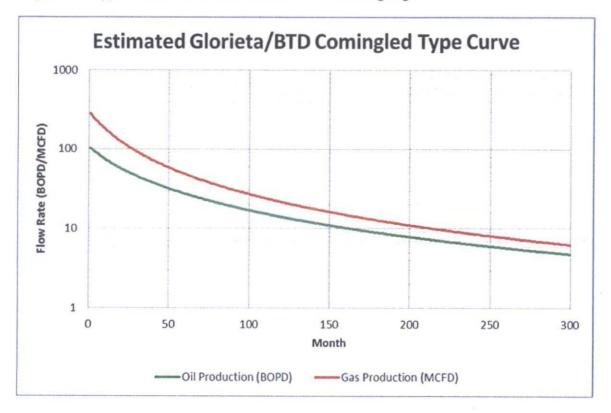


Figure 8: Type curve of Glorieta and BTD commingling





#### www.permianls.com

#### 575.397.3713 2609 W Marland Hobbs NM 88240

For:

ConocoPhillips

Attention: Vernon Mackey

1410 W. County Road

Hobbs, New Mexico 88240

Sample: Identification:

Company: Lease:

Plant:

Sample Data:

Date Sampled

2/18/2014 12:52 PM

Analysis Date Pressure-PSIA 2/19/2014

35

Sampled by: Analysis by:

Logan McIlroy

Meter Run

Britt B #34

ConocoPhillips

Sample Temp F Atmos Temp F

83

Vicki McDaniel

H2S =

4,500 PPM

#### Component Analysis

		Mol	GPM
		Percent	
Hydrogen Sulfide	H2S	0.450	
Nitrogen	N2	2.639	
Carbon Dioxide	CO2	1.329	
Methane	C1	74.780	
Ethane	G2	10,706	2.856
Propane	C3	5.398	1.483
I-Butane	IC4	0.779	0.254
N-Butane	NC4	1.919	0.604
I-Pentane	IC5	0.583	0.213
N-Pentane	NC5	0.628	0.227
Hexanes Plus	C6+	0.789	0.342
		100.000	5.978

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1261.3	Calculated	0.7683
At 14.65 WET	1239.3		
At 14.696 DRY	1265.2		
At 14.696 WET	1243.7	Molecular Weight	22.2509
At 14.73 DRY	1268.1	J	
At 14.73 Wet	1246.3		



#### www.permianls.com 575.397.3713 2609 W Marland Hobbs NM 88240

#### **ASTM DISTILLATION**

ConocoPhillips Attention: Vernon Mackey 1410 W. County Road Hobbs, New Mexico 88240

Sampled By: Logan McIlroy Sample Date; 2/18/14

Sample ID: Britt B #34

Percent Distilled	<u>Temperature</u>		
IBP	125		
5	165		
10	202		
20	261	%Recovered =	93.0
30	327	% Residue =	4.0
40	435	% Loss =	3.0
50	515		
60	610		
70	693		
80	738		
90	761		
EP	765		

<u>Total Sulfur</u>	API Gravity	Specific Gravity
0.6484 wt.%	39.3	0.8284



#### www.permianls.com

#### 575.397.3713 2609 W Marland Hobbs NM 88240

For:

ConocoPhillips

Attention: Vernon Mackey

1410 W. County Road

Hobbs, New Mexico 88240

Sample:

Identification:

Company:

Lease:

Plant:

Sample Data:

Date Sampled

.2/18/2014 11:58 AM

Analysis Date

2/19/2014

Pressure-PSIA

Sampled by: Analysis by:

Logan Mcliroy Vicki McDaniel

Casing

**SEMU 174** 

ConocoPhillips

Sample Temp F

83

Atmos Temp F

H2S =

4,400 PPM

#### Component Analysis

		Mol	GPM
		Percent	
Hydrogen Sulfide	H2S	0.440	
Nitrogen	N2	2.604	
Carbon Dioxide	CO2	0.618	
Methane	C1	75.574	
Ethane	C2	9.514	2.538
Propane	C3	5.478	1.505
I-Butane	IC4	0.754	0.246
N-Butane	NC4	2.143	0.674
I-Pentane	IC5	0.602	0.220
N-Pentane	NC5	0.815	0.295
Hexanes Plus	C6+	<u>1.458</u>	0.631
		100.000	6.108

REAL BTU/CU.FT.		Specific Gravity	
At 14.65 DRY	1299.6	Calculated	0.7809
At 14.65   WET	1276.9		
At 14.696 DRY	1303.6		
At 14.696 WET	1281.4	Molecular Weight	22.6163
At 14.73 DRY	1306.6		
At 14.73 Wet	1284.0		



#### www.permianls.com 575.397.3713 2609 W Marland Hobbs NM 88240

#### **ASTM DISTILLATION**

ConocoPhillips

Attention: Vernon Mackey 1410 W. County Road Hobbs, New Mexico 88240

Sampled By: Logan McIlroy

Sample Date: 2/18/14

Sample ID: SEMU 174

Percent Distilled	<u>Temperature</u>		
IBP	130		
5	180		
10	215		
20	280	%Recovered =	94.0
30	345	` % Residue =	4.0
40	445	% Loss =	2.0
50	536		
60	617		
70	680		
80	703		
90	738		
EP	741		

Total Sulfur	API Gravity	Specific Gravity
0.3688 wt.%	39.4	0.8279

## NALCO Champion Water Analysis Report

An Ecolab Company

Attention: Anthony.baeza@champ-tech.com

Location Code: 23130 Sample ID: AB42153

Login Batch: 2014-02-24\_MFA\_SWICPW

Collection Date: **02/19/2014**Receive Date: **02/24/2014**Report Date: **03/03/2014** 

Customer: ConocoPhillips (1500390)

Region: Eunice Field
Location: Britt B Lease
System: Production System

Equipment: Well 34 Lab ID: ABU-1031

Sample Point: Well Head Valve Up Stream of Choke

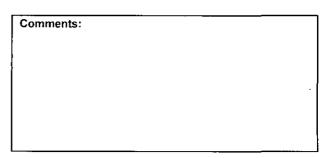
Analyses	Result	Unit <sup>*</sup>
Dissolved CO2	50	mg/L
Dissolved H2S	188.1	mg/L
На	8	
Pressure	70	psi
Temperature	83	۰F

Analyses	Result	Unit
Bicarbonate	634.4	mg/L
Conductivity	130163	μS - cm3
Ionic Strength	1.47	
Resistivity	0.077	ohms - m
Specfic Gravity	1.055	
Total Dissolved Solids	83304.07	mg/L

Cations	Result	Unit
Iron	0.038	mg/L
Manganese	0.013	mg/L
Barium	0.056	mg/L
Strontium	86.68	mg/L
Calcium	2657	mg/L
Magnesium	804.1	mg/L
Sodium	28272.82	mg/L

Anions	Result	Unit
CHLORIDE	48988.96	mg/L
SULFATE	1880	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.52
Barite BaSO4 SI	-0.53
Calcite CaCO3 PTB	263.3
Calcite CaCO3 \$1	1,17
Celestite SrSO4 SI	-0.07
Gypsum Ca\$O4 \$I	-0.35
Hemihydrate CaSO4 SI	-0.35
Saturation Index Calculation (Tomso	n-Oddo Model)



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02/19/2015 Page 1 of 1

## NALCO Champion Water Analysis Report

An Ecolab Company

Attention:Anthony.baeza@champ-tech.com

Location Code: 23299

Sample ID: AB42154

Login Batch: 2014-02-24\_MFA\_SWICPW

Collection Date: 02/19/2014

Receive Date: 02/24/2014 Report Date: 03/03/2014 Customer: ConocoPhillips (1500390)

Region: Eunice Field

Location: SEMU Tubb Lease System: Production System

Equipment: Well 174

Lab ID: ABU-1031

Sample Point: Well Head Valve Up Stream of Choke

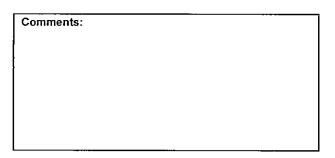
Analyses	Result	Unit
Dissolved CO2	50	mg/L
Dissolved H2S	119.7	mg/L
На	8	
Pressure	100	psi
Temperature	81	۰F

Analyses	Result	Unit
Bicarbonate	475.8	mg/L
Conductivity	187614	µS - ст3
Ionic Strength	2.13	
Resistivity	0.053	ohms - m
Specfic Gravity	1.082	
Total Dissolved Solids	120073.1	mg/L

Cations	Result	Unit
Iron	0.082	mg/L
Manganese	0.044	mg/L
Barium	0.078	mg/L
Strontium	95.58	mg/L
Calcium	3793	mg/L
Magnesium	1040	mg/L
Sodium	41169.79	mg/L

Anions	Resulf	Unit
CHLORIDE	71983.77	mg/L
SULFATE	1515	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.46
Barite BaSO4 \$1	-0.55
Calcite CaCO3 PTB	195.3
Calcite CaCO3 SI	1.12
Celestite SrSO4 SI	-0.05
Gypsum CaSO4 SI	-0.34
Hemihydrate CaSO4 SI	-0.38
Saturation Index Calculation (Tomso	n-Oddo Model)



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02/19/2015 . Page 1 of 1

## NALCO Champion Water Analysis Report

An Ecolab Company

Attention:Anthony.baeza@champ-tech.com

Customer: ConocoPhillips (1500390)

Location Code: 23130 Sample ID: AB42153 Region: **Eunice Field**Location: **Britt B Lease** 

Login Batch: 2014-02-24\_MFA\_SWICPW

System: **Production System** 

Collection Date: **02/19/2014**Receive Date: **02/24/2014**Report Date: **03/03/2014** 

Equipment: Well 34 Lab ID: ABU-1031

Sample Point: Well Head Valve Up Stream of Choke

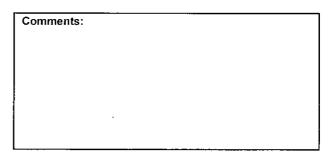
Analyses	Result	Unit
Dissolved CO2	50	mg/L
Dissolved H2S	188.1	mg/L
рН	8	
Pressure	70	psi
Temperature	83	۰F

Analyses	Result	Unit
Bicarbonate	634.4	mg/L
Conductivity	130163	μS - cm3
Ionic Strength	1.47	
Resistivity	0.077	ohms - m
Specfic Gravity	1.055	
Total Dissolved Solids	83304.07	mg/L

Cations	Result	Unit
Iron	0.038	mg/L
Manganese	0.013	mg/L
Barium	0.056	mg/L
Strontium	66.68	mg/L
Calcium	2657	mg/L
Magnesium	804.1	mg/L
Sodium	28272.82	mg/L

Anions	Result	Unit
CHLORIDE	48988.96	mg/L
SULFATE	1880	mg/L

Scale Type	Result
Anhydrite CaSO4 St	-0.52
Barite BaSO4 SI	-0.53
Calcite CaCO3 PTB	263.3
Calcite CaCO3 \$1	1.17
Celestite SrSO4 SI	-0.07
Gypsum CaSO4 SI	-0.35
Hemihydrate CaSO4 SI	-0.35
Saturation Index Calculation (Tomso	n-Oddo Model)



02/19/2015 Page 1 of 1

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Michael Fitzgerald SE New Mexico Permian ConocoPhillips Company 600 N. Dairy Ashford P10-05-5055

Houston, TX 77079

Phone: 281-206-5684 Michael.d.fitzgerald@cop.com

June 9, 2015

**RE:** Downhole Commingling Application

Township 20 South, Range 37 East, N.M.P.M.

Section 10: SW/4 SE4 and E/2 SE/4

Section 15: NE/4 NW/4

Containing 160.00 acres, more or less Lea County, New Mexico

ConocoPhillips Company, as operator of the Britt-B Lease, is seeking approval to downhole commingle the wells referenced herein. (See attached map for specific locations).

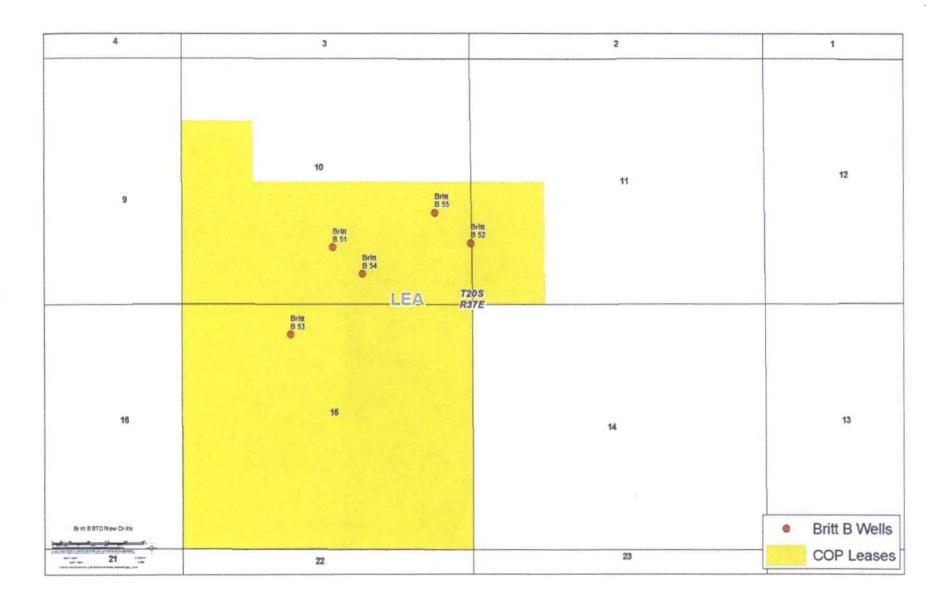
Britt-B wells numbered 51, 52, 53, 54, and 55 are all located on the Britt-B Federal Lease (NMLC-031621B).

Interest Owner	Working Interest	Net Revenue Interest
ConocoPhillips Company	50.000%	43.750%
Chevron USA Inc.	25.000%	21.875%
ZPZ Delaware LLC	25.000%	21.875%
Office of Natural Resource Revenue	00.000%	12.500%
Total	100.000%	100.00%

I certify that the above information is true and correct.

Michael Fitzgerald Associate Landman

ConocoPhillips Company





ConocoPhillips Company P.O. Box 51810 Midland, TX 79710-1810

July 20, 2015

Chevron USA Inc. 15 Smith Rd, Claydesta Plaza Midland, TX 79705 @COPY

SUBJECT: REQUEST FOR APPROVAL OF DOWNHOLE COMMINGLE FOR BRITT B LEASE

To Whom It May Concern:

ConocoPhillips Company is requesting an approval to Downhole Commingle the Skaggs-Glorieta Pool (57190) with the pre-approved pools Weir-Blinebry (63780), Weir-Blinebry East (63800), Monument-Tubb (47090), and Skaggs-Drinkard (57000) pools in ConocoPhillips' Blinebry, Tubb, Drinkard development program in Sections 10 and 15, T20S, R37E, Lea County, New Mexico.

You are being provided notification of this action as an interest owner in the spacing unit. Any comments need to be provided to New Mexico Oil Conservation Division; 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 within 20 days.

If you have any questions regarding this request, I can be reached at 432-688-6938 or via email at ashley.bergen@cop.com

Sincerely,

Ashley Bergen

Regulatory Specialist

shley Bergen



ConocoPhillips Company P.O. Box 51810 Midland, TX 79710-1810

July 20, 2015

ZPZ Delaware LLC 303 Veterans Airpark Lane Midland, TX 79705



SUBJECT: REQUEST FOR APPROVAL OF DOWNHOLE COMMINGLE FOR BRITT B LEASE

To Whom It May Concern:

ConocoPhillips Company is requesting an approval to Downhole Commingle the Skaggs-Glorieta Pool (57190) with the pre-approved pools Weir-Blinebry (63780), Weir-Blinebry East (63800), Monument-Tubb (47090), and Skaggs-Drinkard (57000) pools in ConocoPhillips' Blinebry, Tubb, Drinkard development program in Sections 10 and 15, T20S, R37E, Lea County, New Mexico.

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If you have any questions regarding this request, I can be reached at 432-688-6938 or via email at ashley.bergen@cop.com

Sincerely,

Ashley Bergen Regulatory Specialist

ly Begen



ConocoPhillips Company P.O. Box 51810 Midland, TX 79710-1810

July 20, 2015

Office of Natural Resource Revenue Room A 614 Building 85 Denver Federal Center (6<sup>th</sup> Kipling) Denver, CO 80225

ley Borgen



SUBJECT: REQUEST FOR APPROVAL OF DOWNHOLE COMMINGLE FOR BRITT B LEASE

To Whom It May Concern:

ConocoPhillips Company is requesting an approval to Downhole Commingle the Skaggs-Glorieta Pool (57190) with the pre-approved pools Weir-Blinebry (63780), Weir-Blinebry East (63800), Monument-Tubb (47090), and Skaggs-Drinkard (57000) pools in ConocoPhillips' Blinebry, Tubb, Drinkard development program in Sections 10 and 15, T20S, R37E, Lea County, New Mexico.

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If you have any questions regarding this request, I can be reached at 432-688-6938 or via email at ashley.bergen@cop.com

Sincerely,

Ashley Bergen Regulatory Specialist

SENDER COMPLETE VILLOUS RECIPES COMPLETE UNISSECUCIONON DELIVERY A. Signature □ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. □ Agent X ☐ Addressee Print your name and address on the reverse so that we can return the card to you. B. Received by (Printed Name) C. Date of Delivery Attach this card to the back of the mailpiece. or on the front if space permits. 1. Article Addressed to: If YES, enter delivery address below: Cherron 15 smith Rd, Claydesta Plaza, 3. Service Type ☐ Certified Mail® ☐ Priority Mail Express™ Midland, TX 79705 □ Registered Return Receipt for Merchandise Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes 2. Article Number 7013 3020 0001 2047 9982 (Transfer from service label) PS Form 3811, July 2013 Domestic Return Receipt U.S. Postal Service ... Certified Mail Receipt estieMaiiOrilyaNolnsurance@ 8 茻 • 70 Postage Certified Fee Postmark Return Receipt Fee (Endorsement Required) Here Restricted Delivery Fee (Endorsement Required) 3021 Total Postage & Fees 0 ↔ Postel 701 π or PO Box No. City, State, ZII Ш FS Form 6800, August 2006 5766 5405 1000 3050 Sander computation section <u>Ompusitions of the company of the c</u> TOOO A. Signature □ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. B. Received by (Printed Name) Attach this card to the back of the mailpiece, or on the front if space permits. D. Is delivery address different fro 1. Article Addressed to: If YES, enter delivery address 303 veterans Airpark Lang Midland, TX 79705 3. Service Type Certified Mail® ☐ Priority Mail Express™ Registered Return Receipt for Merchandise ☐ Collect on Delivery ☐ Insured Mail 4. Restricted Delivery? (Extra Fee) ☐ Yes 2. Article Number 7013 3020 0001 2047 9975 (Transfer from service label) PS Form 3811, July 2013 Domestic Return Receipt

SENDER COMPLETE VISSECTIONS Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. A. Signature □ Agent X ☐ Print your name and address on the reverse ☐ Addressee so that we can return the card to you. B. Received by (Printed Name) C. Date of Delivery Attach this card to the back of the mallpiece, or on the front if space permits. 1. Article Addressed to: If YES, enter delivery address below: Office of Natural Resource Revenue ROOM A WIH. Building 85, Denver Federall' (center (with kipling) 3. Service Type Certified Mail®
Registered □ Priority Mail Express™ ☐ Return Receipt for Merchandise Insured Mail ☐ Collect on Delivery benver, co, 80235 4. Restricted Delivery? (Extra Fee) ☐ Yes 2. Article Number 7013 3020 0001 2047 (Transfer from service label) PS Form 3811, July 2013 Domestic Return Receipt U.S. Postal Service... CERTIFIED MAIL RECEIPT 999 Only No Insurance Coverage Provided <u>+02</u> Postage Certified Fee 1000 **Postmark** Return Receipt Fee (Endorsement Required) Here Restricted Delivery Fee (Endorsement Required) 3020 3020 Total Postage & Fees f Natural Resolu 707 Street, Apt. No. or PO Box No. City, State, ZIP+4 BUTE PSForm8800, August 2018 ScoReverse for Instruct

#### McMillan, Michael, EMNRD

From:

Bergen, Ashley <Ashley.Bergen@conocophillips.com>

Sent:

Tuesday, September 01, 2015 2:52 PM

To:

McMillan, Michael, EMNRD

Subject:

Britt B Wells No. 51,52,53,54,55 Lea Co. DHC

Attachments:

Copy of SEMU #174 Production Allocation.xls

Good Afternoon Mr. McMillan,

We will use the historical data from the analog well of our new drills, SEMU 174, to determine the production allocation for the three zones (Blinebry, Tubb and Drinkard). SEMU 174 is recently drilled targeting Blinebry, Tubb and Drinkard formations in 2007 in the same area as those that we are planning to drill in the DHC proposal. The approved allocation for SEMU 174 is

	Oil. Water Gas
Blinebry Allocation	90% 85% 24%
Tubb Allocation	5.0% 7.5% 38%
Drinkard Allocation	5.0% 7.5% 38%

The above allocation percentage for SEMU 174 was determined by production test and calculation based on open perf distribution. The details can be found in the attached excel sheet.

Please let me know if you have any questions.

Thanks,

#### **Ashley Bergen**

Regulatory Specialist - MCBU ConocoPhillips Lower 48 3300 North A St.- Bldg 6 Midland, TX 79705-5406

T: 432.688.6938 | M: 432.640.7012 | ashley.bergen@conocophillips.com

#### **SEMU #174-Production Allocation Report**

Opetator:

ConocoPhillips

API#:

3002538105

**Surface Location:** 

SEC 14, R37E,T20S

Formations completed:

Blinebry, Tubb & Drinkard

Allocation is based on production tests

#### PRODUCTION TEST---Tubb/Drinkard stabilized test from 5/22/07 to 6/6/07

First Production---5/02/07

Date	Oil Prod	Water Prod	Gas Prod
	BBI/D	BBL/D	MCF/D
05/22/07		<b>四水原 39</b> 克·斯·萨	<b>3.6</b> 183 注: //
05/23/07	震" 48 (14)。	-/* √36 <u>%</u> -/*∜	183
05/24/07	得知:65%		고 <sup>1</sup> 교육(183고본학교
05/25/07	- 12" · · · ·	.对门题: 362°** - 70%	183点。"是
05/28/07	8 - 4 · . · . · . · . · . · . · . · . · . ·	24	🗀 🐛 178%,
05/29/07	点、季 [10] [14]	**************************************	178°,
05/31/07	· 4. 4. 8 · · · · · · · · · · · · · · · · · ·	22	್ಕ 🗻 169 🖰 🙃 🗓
. 06/01/07	7 7 8 ta - + :	245""	JANES 1787 - 7013
06/04/07	15-17-18 Ren 18-1	136 <u>.</u> 136. 1	上流流。1788 "专业
06/ <b>06</b> /07	(15 (1 <b>9</b> ), a (1), i)	は続け422きに海で	ರ್ಷ ಪೌ⊸188೬ ಕೃತ
Average	8.60	28.90	180.10

## PRODUCTION TEST---Blinebry, Tubb and Drinkard (commingled) stabilized test from 6/28/07 to 7/2/07 First Production---6/23/07

Date	Oil Prod	Water Prod	Gas Prod
	BBI/D	BBL/D	MCF/D
06/28/07	成於。下海 <b>90</b> jac jach	a.∵⊬238 🖘∵	
06/29/07	`≥⊀_	美·性 <b>21.</b> // 美子	204
06/30/07	~	To 2º 156' \$ ₹	⇒ 差 296□ - 電
07/01/07	逐編的 <b>/81</b> /4/第位	<b>引物的 201</b> 億十二年	"一系"220天。一一
07/02/07	125	181	1 243° 1
Average	86.40	197.40	236.40

CALCULATION--- of Blinebry allocation using subtraction method

Oil Prod	Water Prod	Gas Prod
BBI/D	BBL/D	MCF/D
77.80	168.50	56.30

CALCULATION---% allocation per formation

	C	Dil Prod		Water Prod	Gas Prod	
Blinebry Allocation =			90.05%	85.36%		23.82%
Tubb/Drinkard Allocation=			9.95%	14.64%		76.18%

Tubb/Drinkard allocation is based on open perf distribution:		% Allocation	Total Well % Allocation
Tubb/Drinkard net perf interval=	40 ft	100%	
Tubb perf interval=	20 ft	50%	5%
Drinkard perf interval=	20 ft	50%	5%

	Oil 🍇 🔭 📑	Water -	Gas * · · · · · · · ·
Blinebry Allocation (2004)	* 90%	****	24%
Tubb Allocation	5.0%		38%
Drinkrad Allocation 100 100	<i>∴</i>	±	- 18-40 rugs. 138%

<sup>\*</sup>Allocation is based on production tests and Net perf intervals