

Revised March 23, 2017

RECEIVED: 12/06/2018	REVIEWER: MAM	TYPE: DHC	APP NO: PMAM/8341 38349
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & 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

Applicant: ConocoPhillips Company **OGRID Number:** 217817
Well Name: Hardy 36 State 028 **API:** 30-025-36624
Pool: Hardy; San Andres, North/Skaggs; Grayburg **Pool Code:** 96393/57380

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
 NSL NSP (PROJECT AREA) NSP (PRORATION UNIT) SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
 DHC CTB PLC PC OLS OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR

DHC-4899

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
 A. Offset operators or lease holders
 B. Royalty, overriding royalty owners, revenue owners
 C. Application requires published notice
 D. Notification and/or concurrent approval by SLO
 E. Notification and/or concurrent approval by BLM
 F. Surface owner
 G. For all of the above, proof of notification or publication is attached, and/or,
 H. No notice required

FOR OCD ONLY

- Notice Complete
 Application Content Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** 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.

Rhonda Rogers

Print or Type Name

11/26/2018

Date

432-688-917x4

Phone Number

roggers@conocophillips.com

e-mail Address


 Signature



Rhonda Rogers
Staff Regulatory Technician
Phone: (432)688-9174

ConocoPhillips Company
PO Box 51810
Midland, TX 79710

November 29, 2018

State of New Mexico
Oil Conservation Division
Attn: Mr Phillip Goetze
1220 South Saint Frances Drive
Santa Fe, New Mexico 87505

SUBJECT: REQUEST FOR A DOWNHOLE COMMINGLE FOR THE HARDY 36 STATE 028

Dear Mr. Goetze,

ConocoPhillips Company respectfully requests an approval of our plans to Downhole Commingle the Hardy; San Andres- North (96393) and the Skaggs; Grayburg (57380) in the Hardy 36 State 28 well.

The wells located in Unit Letter H, 2374' from North line and 511' for East line Section 36, Township 20S, Range 37E, Lea County, New Mexico.

ConocoPhillips Company hereby certifies that 28 have 100% working interest ownership for this well and State is royalty owner. The granting request will prevent waste by providing access to otherwise marginal production.

According to Rule 19.15.12 (4): b, the State of New Mexico, Oil Conservation Division, Engineering bureau (1220 South St. Francis Drive, Santa Fe, NM 87505): that objections must be filed in writing with the division's Santa Fe office within 20 days from the date the division receives the application.

Enclosed are the following documents in support of this request

- Administrative Application Checklist
- Copy of the New Mexico Form C-107A (with Attachments)
- Attached is a list of interest Parties
- Verification of Notification (with Attachments)

If you have any questions regarding this enclosed application, I can be reached at (432) 688-9174, or via email at rogerrs@conocophillips.com.

Sincerely,

Rhonda Rogers
Staff Regulatory Technician



Rhonda Rogers
Staff Regulatory Technician
Phone: (432)688-9174

ConocoPhillips Company
PO Box 51810
Midland, TX 79710

November 29, 2018

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Oil Conservation Division
Attn: Mr Phillip Goetze
1220 South Saint Frances Drive
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Dear To whom this may concern;

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Sincerely,

A handwritten signature in black ink that reads "Rhonda Rogers". The signature is fluid and cursive, with the first name being the most prominent part.

Rhonda Rogers
Staff Regulatory Technician

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brizosa 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

Form C-107A
Revised August 1, 2011

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

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Operator CONOCOPHILLIPS COMPANY P.O. BOX 51810, MIDLAND, TX 79710
Address

Lease HARDY 36 STATE Well No. 28 Unit Letter-Section-Township-Range UL. H. SEC 36, T20S, R37E LEA LEA County

OGRID No. 217817 Property Code 31867 API No. 30-025-38624 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	HARDY, SAN ANDRES, NORTH		SKAGGS, GRAYBURG
Pool Code	98393		57380
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	TOP 3928', BOTTOM 4050'		TOP 4140', BOTTOM 4216'
Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT		ARTIFICIAL LIFT
Bottomhole Pressure <small>(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)</small>			
Oil Gravity or Gas BTU <small>(Degree API or Gas BTU)</small>	39		39
Producing, Shut-In or New Zone	SHUT IN TILL APPROVAL		SHUT IN TILL APPROVAL
Date and Oil/Gas/Water Rates of Last Production. <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	Date: 10/1/18 Rates: OIL 1.112, GAS 7.686 WATER 165.641	Date: Rates:	Date: 10/1/18 Rates: OIL 2.780, GAS 19.219 WATER 414.101
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil 29 % Gas 29 %	Oil % Gas %	Oil 71 % Gas 71 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Rhonda Rogers TITLE REGULATORY TECH DATE 12/11/2018

TYPE OR PRINT NAME RHONDA ROGERS TELEPHONE NO. (432) 688-9174

E-MAIL ADDRESS rogerrs@conocophillips.com

HARDY 36 STATE 28
API 30-025-36624
RECOMPLETE HARDY; SAN ANDRES, NORTH (96393)

Completion (Stage 1 - Acid Frac):

- 1) RU Wireline. RIH w/CIBP & set @ ~4370'. RD wireline.
 - 2) RU wireline services. Perforate intervals at 4 spf (perforating to be done w/lubricator in place)
 - a. 60-degree phasing w/ 4" Titan Slick Gun w/super deep penetrating charges (ch-40g, eh-0.52", pen-52.13")
- | <u>San Andres</u> | <u>Feet</u> | <u>Shots</u> |
|-------------------|-------------|--------------|
| 4,060- 4,260 | 200 | 800 |
- 3) TOOH w/perforating gun and inspect to verify # of shots fired.
 - 4) RU hydrotesters. PU & RIH w/ pkr & 3 ½ L-80 Tbg work string to 3,730' while testing tbg below slips @ 8000#.
 - 5) Test CIBP @ 4370' to 5,000 psi (surface), ~7272 (bottom hole).
 - 6) RD hydrotesters. Pump away acid frac. Record perf break down pressure in Wellview.
 - 7) Record: P(max); P(min); ISIP; SITP(5 min); SITP(10 min); SITP(15 min); SITP(20 min)
 - 8) RDMO acid frac services.
 - 9) POOH & LD packer. Stand back workstring.

Completion (Stage 2 - Sand Frac):

- 10) RIH w/CIBP & set @ ~4096'. RD wireline.
 - 11) RU wireline services. Perforate intervals at 4 spf (perforating to be done w/lubricator in place)
 - a. 60-degree phasing w/ 4" Titan Slick Gun w/super deep penetrating charges (ch-40g, eh-0.52", pen-52.13")
- | <u>Grayburg</u> | <u>Feet</u> | <u>Shots</u> |
|-----------------|-------------|--------------|
| 3,865- 4,060 | 195 | 780 |
- 12) TOOH w/perforating gun and inspect to verify # of shots fired. RD wireline services.
 - 13) PU & TIH w/ packer on workstring. Test CBP @ 4096' to 5,000 psi (surface), ~7130 (bottom hole).
 - 14) Pull up workstring to 3,765 (100' above top perf)
 - 15) Pump away acid to break down perms before frac. Record perf break down pressure in Wellview.
 - 16) NDBOP. NU full-bore frac valve to 7-1/16" flange.
 - 17) RDMO pulling unit.
 - 18) RU frac services. Frac well without pulling unit on location.

HARDY 36 STATE 28
API 30-025-36624
RECOMPLETE HARDY; SAN ANDRES, NORTH (96393)

- 19) Acid BreakDown
- 20) Frac-treat Grayburg perforated interval (3865-4060) down 3-1/2", 9.3#, L-80 tbg @ 40 BPM – anticipated treating pressure at 3000# - 4000#
- 21) Record: P(max); P(min); ISIP; SITP(5 min); SITP(10 min); SITP(15 min); SITP(20 min)
- 22) RDMO sand frac services.
- 23) Shut well in for 24 hours to let resin coat cure.
- 24) Open well and flow back well until dead. Max 1 bbl/min
- 25) MIRU pulling unit.
- 26) Release packer. Tag for fill.
- 27) POOH & LD tbg & packer (workstring).
- 28) PU & RIH w/drill bit and 2-7/8", 6.5#, L-80 tbg. Drill out CBP set at 4096'.
- 29) Clean out. RIH to PBTB and circulate well clean.
- 30) TOH w/bit and tbg. Lay down bit.
- 31) RIH w/tbg and TAC. Set tbg.
- 32) ND BOP. NU well.
- 33) RIH w/pump and rods. Space pump, hang well off.
- 34) Notify MSO to sign-off on well.
- 35) RDMO and release all rental equipment. Return well to production.

Grayburg Perforations				
Perf #	Top	Bottom	Perf Length	Perforation Type
1	3926	3936	10	Sand Frac
2	3955	3965	10	Sand Frac
3	3995	4010	15	Sand Frac
4	4015	4020	5	Sand Frac
5	4040	4050	10	Sand Frac

San Andres Perforations				
Perf #	Top	Bottom	Perf Length	Perforation Type
1	4140	4145	5	Acid Frac
2	4159	4164	5	Acid Frac
3	4194	4199	5	Acid Frac
4	4211	4216	5	Acid Frac

Formation	Feet	%
Grayburg	50	71.43%
San Andres	20	28.57%
Total	70	100.00%

MD (ftKB)	
19.0	
1,293.6	
1,339.9	Rustler (final)
2,629.9	Salado (final)
	Tanhill (final)
	VATES (final)
	SEVEN RIVERS (final)
3,565.0	QUEEN (final)
3,648.6	
3,673.6	
3,700.5	Penrose (final)
3,727.7	
3,754.6	
3,783.5	
3,830.1	GRAYBURG (final)
3,862.5	
3,889.8	
3,899.0	
3,918.6	
3,943.6	
3,964.9	
3,995.1	
4,009.8	
4,024.6	
4,046.9	
4,053.5	
4,078.4	SAN ANDRES (final)
4,083.7	
4,145.0	
4,193.9	
4,199.1	
4,259.8	
4,372.0	GI ORIFTA (final)
	EL INFERNO (final)
6,336.9	TURR (final)
	DRINKARD (final)
6,976.0	
7,565.0	STRAWN (final)
7,678.1	
7,695.9	
7,758.9	
8,015.4	
8,062.0	

Total Well								
Date	Days Online	Oil (bbl/d)	umulative (	Gas (mcf/d)	umulative (	Water (bbl/d)	WOR	GOR
6/1/2018	18	5.482	0.2	12.386	0.4	171	31.2	2.3
7/1/2018	27	5.919	0.3	25.245	1.2	392	66.2	4.3
8/1/2018	8	1.538	0.4	7.094	1.4	116	75.5	4.6
9/1/2018	4	0.868	0.4	4.040	1.5	64	73.8	4.7
10/1/2018	31	3.892	0.5	26.902	2.3	580	149.0	6.9

Grayburg Allocation	71.43%
San Andres Allocation	28.57%

Grayburg								
Date	Days Online	Oil (bbl/d)	umulative (	Gas (mcf/d)	umulative (	Water (bbl/d)	WOR	GOR
6/1/2018	18	3.915	0.117	8.847	0.265	122.024	31.2	2.3
7/1/2018	27	4.228	0.249	18.032	0.824	279.954	66.2	4.3
8/1/2018	8	1.099	0.283	5.067	0.981	82.949	75.5	4.6
9/1/2018	4	0.620	0.301	2.886	1.068	45.762	73.8	4.7
10/1/2018	31	2.780	0.387	19.216	1.664	414.101	149.0	6.9

San Andres								
Date	Days Online	Oil (bbl/d)	umulative (	Gas (mcf/d)	umulative (	Water (bbl/d)	WOR	GOR
6/1/2018	18	1.566	0.047	3.539	0.106	48.810	31.2	2.3
7/1/2018	27	1.691	0.099	7.213	0.330	111.982	66.2	4.3
8/1/2018	8	0.440	0.113	2.027	0.393	33.180	75.5	4.6
9/1/2018	4	0.248	0.120	1.154	0.427	18.305	73.8	4.7
10/1/2018	31	1.112	0.155	7.686	0.665	165.641	149.0	6.9

Well Test History - Total Well				
Test Date	Oil Rate	Water Rate	Gas Rate	Duration
6/30/2018	9	450	45	24
10/2/2018	7	580	45	24

Grayburg Allocati	71.43%
San Andres Allocat	28.57%

Well Test History - Grayburg Allocation				
Test Date	Oil Rate	Water Rate	Gas Rate	Duration
6/30/2018	6.428571	321.4286	32.14286	24
10/2/2018	5	414.2857	32.14286	24

Well Test History - San Andres Allocation				
Test Date	Oil Rate	Water Rate	Gas Rate	Duration
6/30/2018	2.571429	128.5714	12.85714	24
10/2/2018	2	165.7143	12.85714	24



Joey Moppert
Landman
Mid-Continent – SE NM Permian
600 N. Dairy Ashford
EC3 - 07- W355
Houston, TX 77079-1175
Tel: 281-206-5165
Fax: 281-206-5675
Edward.J.Moppert@ConocoPhillips.com

November 29, 2018

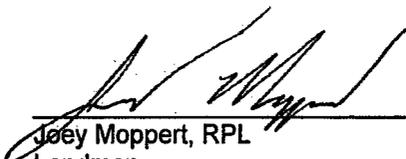
RE: **Commingling Application**
Hardy 36 State #28 Well
SE/4NE/4 Sec. 36-20S-37E
Lea County, NM

The ConocoPhillips operated Hardy 36 State #28 well is located 2374' FNL and 511' FEL of Section 36-20S-37E. The well lies on State of New Mexico Lease # B-2656.

The ownership for the working interest, overriding royalty interest, and royalty interest owners for both the Skaggs Grayburg Pool and the Hardy San-Andres North Pool is as follows:

Interest Owner	Working Interest	Net Revenue Interest	ORR Interest	Royalty Interest
ConocoPhillips Company	100%	87.50%		
State of New Mexico				12.5%

I certify that the above information is true and correct.



Joey Moppert, RPL
Landman
ConocoPhillips Company

LAST 6 MONTHS PRODCUTION PER ZONE PERCENTAGE								
API Well #	Well #	Pool	Pool	Percentag	Months Produced	Current Production		
						Oil BOPD	Water BWPD	MCFD
30-025-36624-00	Hardy 36 State 28	Skaggs Grayburg	57380	71%	Apr-18	0	0	0
		Hardy; San Andres, North	96393	29%	Apr-18	0	0	0
		Skaggs Grayburg	57380	71%	May-18	0	0	0
		Hardy; San Andres, North	96393	29%	May-18	0	0	0
		Skaggs Grayburg	57380	71%	Jun-18	116	3639	257
		Hardy; San Andres, North	96393	29%	Jun-18	48	1486	105
		Skaggs Grayburg	57380	71%	Jul-18	130	8627	542
		Hardy; San Andres, North	96393	29%	Jul-18	53	3524	221
		Skaggs Grayburg	57380	71%	Aug-18	34	2556	152
		Hardy; San Andres, North	96393	29%	Aug-18	14	1044	62
		Skaggs Grayburg	57380	71%	Sep-18	18	1365	84
		Hardy; San Andres, North	96393	29%	18-Sep	8	557	34