ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau 1220 South St. Francis Drive, Santa Fe, NM 87505



2	cation Acronyn [NSL-Non-Sta [DHC-Dov	andard Location] [NSP-Non-Standard vnhole Commingling] [CTB-Lease C ool Commingling] [OLS - Off-Lease	ATIONS FOR EXCEPTIONS TO DIV THE DIVISION LEVEL IN SANTA FE Proration Unit] [SD-Simult commingling] [PLC-Pool/L	ISION RULES AND REGULATIONS caneous Dedication] cease Commingling] Measurement]
ett in	, rate	[SWD-Salt Water Disposal] [II] alified Enhanced Oil Recovery Certific	PI-Injection Pressure Increa	ase]
رب _ر [1]	TYPE OF A	PPLICATION - Check Those Which	Apply for [A]	PHL
[-]	[A]	Location - Spacing Unit - Simultane NSL NSP SD		-Apache Corpo
	Chec [B]	k One Only for [B] or [C] Commingling - Storage - Measurem DHC CTB PLC		0LM -5B Strte 30-015-420
	[C]	Injection - Disposal - Pressure Incre WFX PMX SWD		PPR POOL
	[D]	Other: Specify	·	-RedLAKE - Gueen-Gn,
[2]	NOTIFICAT [A]	TION REQUIRED TO: - Check Those Working, Royalty or Overriding		· · · · · · · · · · · · · · · ·
	[B]	Offset Operators, Leaseholders	or Surface Owner	Glon, eta-y
	[C]	Application is One Which Requ	ires Published Legal Notice	96836
	[D]	Notification and/or Concurrent U.S. Bureau of Land Management - Commission		
	[E]	For all of the above, Proof of N	otification or Publication is	Attached, and/or,
	[F]	Waivers are Attached		
[3]		CURATE AND COMPLETE INFO ATION INDICATED ABOVE.	RMATION REQUIRED T	O PROCESS THE TYPE
[4] approv applic	val is <mark>accurate</mark> a	TION: I hereby certify that the information complete to the best of my knowled equired information and notifications are	ige. I also understand that n	plication for administrative o action will be taken on this
	Note	: Statement must be completed by an individ	ual with managerial and/or super	visory capacity.
PFECA	FISHER	Koppa Tishan	SR STAFF REG ANA	IVer
	or Type Name	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Title -	LYST 6/11/2014

June 11, 2014

Mr. Phillip Goetze New Mexico Oil Conservation Division 1220 South Saint Francis Drive Santa Fe, New Mexico 87505-4225

RE: Application for Exception to Rule 303-C – Downhole Commingling

SB State #004 API 30-015-42003 Unit Letter E, Section 2, T18S, R27E

Red Lake; Glorieta-Yeso, NE (96836) & Red Lake; Q-GB-SA (51300)

Eddy County, New Mexico

Dear Mr. Goetze:

Enclosed please find form C-107A and attachments for downhole commingling the captioned well. The ownerships (WI, NRI and ORRI) of these pools are identical in this wellbore from 1700' to the top of the Abo formation. The fluids from each of these pools are compatible as seen in other similar commingles in the area. Combining these fluids will not result in any damage to these pools. Commingling will improve the efficiency of present and future recovery operations. Cross flow will not be a problem due to having a production lift system capable of keeping the well pumped off thereby maximizing production. This commingling will not reduce the value of the total remaining production.

The allocation method used for this well was determined by analyzing the cumulative oil, gas and water production of offset producers surrounding this well. Supporting documentation is shown with the attached graphs. Also attached are six months of well tests for our currently producing SB State #1 & #2 and production of the #4, currently producing from the Glorieta-Yeso only.

If you need additional information or have any questions, please give me a call at (432) 818-1062 or contact the engineer, McKensy Corbett @ (432) 818-1079.

Sincerely,

Reesa Holland Fisher

Sr. Staff Regulatory Analyst

Apache Corporation is applying for administrative downhole commingling order for the SB State #4. The SB State #4 was drilled, acidized and frac'ed in the Glorieta-Yeso reservoir. The Glorieta-YESO perforated interval we completed this well in is from (Top: 3,173') to (Bottom: 3,929'). Over a three month period we have pumped the well off and recovered 100% of the load water (5,146 Bbls). The current production is 17 Bopd and 107 Bwpd.

Based on offset production in this area, drilling separate wells or dual completions to produce from the San Andres and Glorieta-Yeso separately are uneconomical and marginal. The most economical way to recover the San Andres and Glorieta-Yeso reserves in this particular area is to downhole commingle production from both zones.

Glorieta-Yeso production results from the SB State #4 are currently 17 Bbls of Oil, 107 Bbls of water, and 77 MCF gas per day. The economics to drill, complete and operate a Glorieta/YESO completion compared to a San Andres-Glorieta-YESO completion are as follows:

Economics with only YESO reserves

NET MBOE 60.1

ROR 11.5%

Economics with YESO and San Andres reserves

NET MBOE 90.4

ROR 31.5%

The additional perfs in the San Andres should add 23 BOPD and 35.8 MBOE and increase the ROR to 31.5 %.

It is recommended to perforate and fracture stimulate the San Andres is from (Top: 1734') to (Bottom: 2,596') and down hole commingle with Glorieta/YESO.

Approval of this commingling application will allow for the prevention of waste resources.



June 11, 2014

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Sincerely,

Reesa Holland Fisher

Sr. Staff Regulatory Analyst

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

DISTRICT IV

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

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

□AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-015-4200	51300	51300 Red Lake, Queen-Gran			
Property Code	Pro	pperty Name	<u> </u>	Well Number	
308700	SB	STATE	004		
OGRID No.	Op	erator Name		Elevation	
873	APACHE (CORPORATION		3551'	

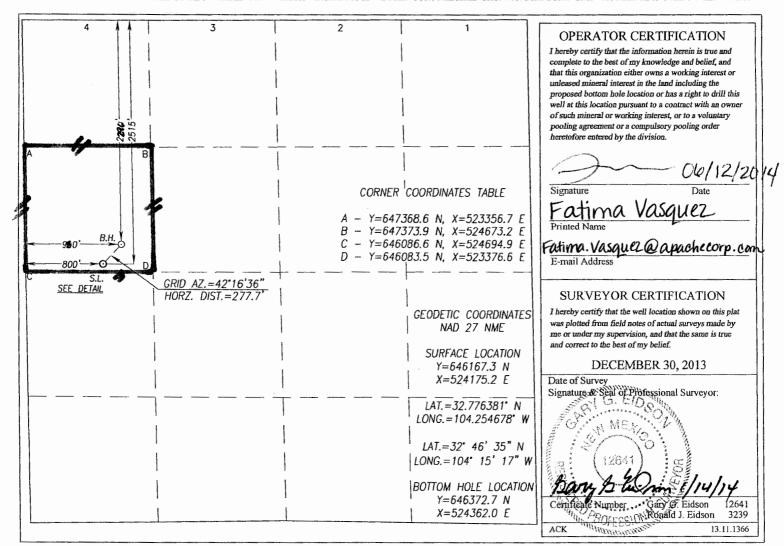
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	2	18-S	27-E		2515	NORTH	800	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	2	18-S	27-E		2296	NORTH	980	WEST	EDDY
Dedicated Acres	Joint or	Infill C	Consolidation C	ode Ord	er No.			·	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



DISTRICT I

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

□AMENDED REPORT

12641

3239

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-015-4200	96836 Pool Code	4				
Property Code		perty Name STATE)	Well Number		
OGRID No.		erator Name		Elevation		
873	APACHE C	CORPORATION		3551'		

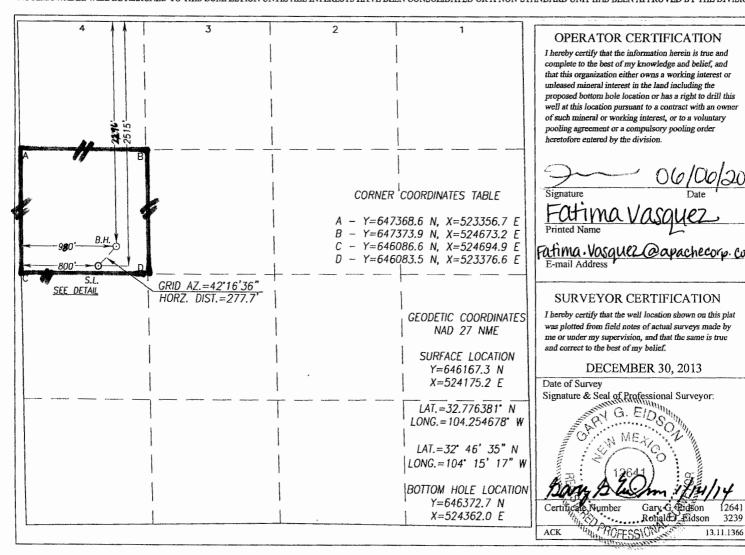
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Е	2	18-S	27-E		2515	NORTH	800	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range Lot Idn		Feet from the	North/South line	Feet from the	East/West line	County
Е	2	18-S	27-E		2 296	NORTH	9 3 0	WEST	EDDY
Dedicated Acres	Joint or	Infill	Consolidation C	ode Ord	er No.				
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



District I

1625 N. French Drive, Hobbs, NM 88240

Form C-107A Revised June 10, 2003

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

E-MAIL ADDRESS Reesa.Fisher@apachecorp.com

District IV

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 Establish Pre-Approved Pools
EXISTING WELLBORE

X Vac No

I ICATION FOR DOWNHOLF COMMINCLING

1220 S. St. Francis Dr., Santa Fe, NM 87505	APPLICATION FOR DO	WNHOLE COMMINGLING	_X YesNo
Apache Corporation	30	3 Veterans Airpark Lane Suite 1000	O Midland TX 79705
Operator		dress	
SB State	004 E	02 18S 27E	Eddy
Lease	Well No. Unit Letter-	Section-Township-Range	County
OGRID No. 873 Property Co	de 308700 API No. 30-015	5-42003 Lease Type:	_Federal _X_StateFee
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Red Lake; Qu-GB-SanAndres		Red Lake; Glorieta-Yeso, NE
Pool Code	51300		96836
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1734'-2596'		3173'-3929'
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial 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)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	39.0		39.0
Producing, Shut-In or New Zone	New Completion (Zone)		New Completion (Zone)
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date:	Date:	Date:
estimates and supporting data.)	SEE Rates: ATTACHED	Rates:	Rates: ATTACHED
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.)	41 % 39 %	% %	59 % 61 %
L	ADDITIO	NAL DATA	
Are all working, royalty and overriding If not, have all working, royalty and over			Yes No Yes No
Are all produced fluids from all commi	ngled zones compatible with each o	other?	YesX No
Will commingling decrease the value or	f production?		Yes NoX
If this well is on, or communitized with or the United States Bureau of Land Ma			Yes_X No
NMOCD Reference Case No. applicable	e 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 of Notification list of working, royalty Any additional statements, data or of the support of	at least one year. (If not available, ry, estimated production rates and sor formula.	attach explanation.) supporting data. r uncommon interest cases.	
	PRE-APPRO	OVED POOLS	
If application is	to establish Pre-Approved Pools, th	ne following additional information wi	II be required:
List of other orders approving downhol List of all operators within the proposed Proof that all operators within the proposed Bottomhole pressure data.	d Pre-Approved Pools		
I hereby certify that the information	• /	the best of my knowledge and believes	
SIGNATURE DUSA TU			DATE 6/11/2014
TYPE OR PRINT NAME Reesa	Fisher	TELEPHONE NO. (_43	818-1062

Page 1 of 2 6/11/2014 1:15:53 pm

Select By: Field

Display: All well tests between 12/01/2013 - 06/09/2014

Test	Effective	Measured	Туре			24 Hour Volume	es				Ratios			Fluid
Date	Date	Hours		Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	Level
Field: ARTESIA	A (BP)													
SB STATE #1	GLORIET	A YESO C01												
12/31/2013	12/31/2013	3 24	Α	39	6	34	33	0	5,667	872	0	0	872	
1/23/2014	1/23/2014		A	50	4	36	46	0	9,000	720	0	0	720	
2/6/2014	2/6/2014		A	66	4	31	62	0	7,750	470	0	0	470	
4/26/2014	4/26/2014		A	65	4	30	61	0	7,500	462	0	0	462	
5/22/2014	5/22/2014		A	64	4	27	60	0	6,750	422	0	0	422	
Averages by Co	ompletion			57	4	32	52	0						
SB STATE #1	QUEEN-G	RAYBURG S	A C02											
12/31/2013	12/31/2013	24	Α	39	6	34	33	O	5,667	872	0	0	872	
1/22/2014	1/22/2014	24	Α	50	4	36	46	0	9,000	720	0	0	720	
2/6/2014	2/6/2014	24	Α	66	4	31	62	0	7,750	470	0	0	470	
3/13/2014	3/13/2014	24	Α	57	5	36	52	0	7,200	632	0	0	632	
4/5/2014	4/5/2014	24	Α	25	7	29	18	0	4,143	1,160	0	0	1,160	
5/22/2014	5/22/2014	24	Α	25	7	27	18	0	3,857	1,080	0	0	1,080	
Averages by Co	ompletion			44	6	32	38	0						
SB STATE #2	GLORIET	'A YESOJ												
4/11/2014	4/11/2014	24	Α	524	0	0	524	0		0		0	0	
4/26/2014	4/26/2014	24	Α	639	71	175	568	0	2,465	274	0	0	274	
4/27/2014	4/27/2014	24	A	458	73	187	385	0	2,562	408	0	0	408	
4/28/2014	4/28/2014	24	Α	564	69	190	495	0	2,754	337	0	0	337	
5/12/2014	5/12/2014	24	Α	395	59	219	336	0	3,712	554	0	0	554	
5/14/2014	5/14/2014	24	Α	425	67	179	358	0	2,672	421	0	0	421	
5/15/2014	5/15/2014	24	Α	375	57	175	318	0	3,070	467	0	0	467	
5/17/2014	5/17/2014	24	Α	372	50	171	322	0	3,420	460	0	0	460	
5/18/2014	5/18/2014	24	Α	300	30	143	270	0	4,767	477	0	0	477	
5/19/2014	5/19/2014		A	421	47	174	374	0	3,702	413	0	0	413	
5/20/2014	5/20/2014	24	A	438	48	160	390	0	3,333	365	0	0	365	
5/21/2014	5/21/2014	24	A	295	38	179	257	0	4,711	607	0	0	607	
5/22/2014	5/22/2014		A	357	39	112	318	0	2,872	314	0	0	314	
5/23/2014	5/23/2014		A	453	62	231	391	0	3,726	510	0	0	510	
5/25/2014	5/25/2014		A	445	57	180	388	0	3,158	404	0	0	404	
5/26/2014	5/26/2014		A	351	62	186	289	0	3,000	530	0	0	530	
5/27/2014	5/27/2014		A	450	51	224	399	0	4,392	498	0	0	498	
5/31/2014	5/31/2014		A	433	40	200	393	0	5,000	462	0	0	462	

^{**} All values are recorded using imperial units.

Page 2 of 2 6/11/2014 1:15:53 pm

Select By: Field

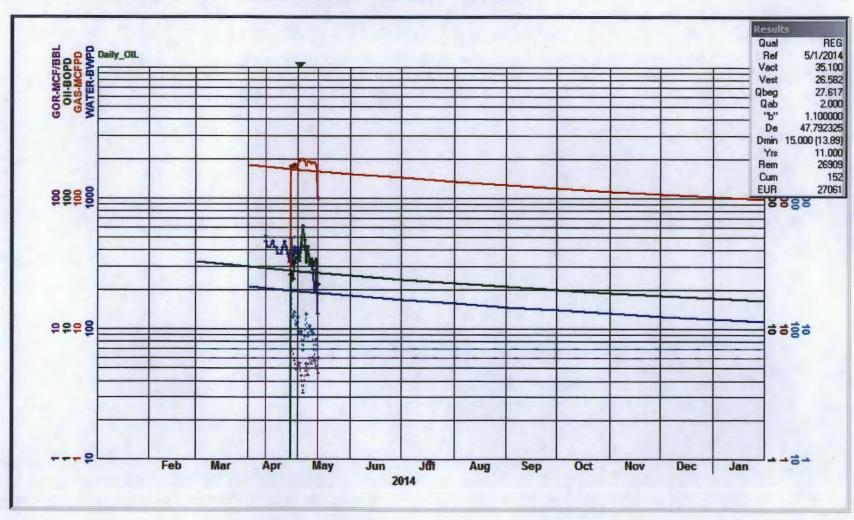
Display: All well tests between 12/01/2013 - 06/09/2014

Test Date	Effective M Date	Measured Hours		Type	Gr Liquid	OH									
L.I.I. ADTECIA				Gr Elquio	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	Leve	
ieia: AKTESIA	(BP)														
SB STATE #2 [GLORIET	A YESO]													
6/2/2014	6/2/2014	24		427	50	208	377	0	4,160	487	0	0	487		
6/3/2014	6/3/2014		A A	386	48	208	338	0	4,333	539	0	0	539		
6/4/2014	6/4/2014		A	174	37	188	137	0	5,081	1,080	0	0	1,080		
6/5/2014	6/5/2014		A	446	40	204	406	0	5,100	457	0	0	457		
6/8/2014	6/8/2014		A	191	29	88	162	0	3,034	461	0	0	461		
Averages by Co		24	A	405	49	173	356	0	5,054	401	v	v	401		
SB STATE #4 [GLORIET	A YESO]													
4/11/2014	4/11/2014	24	Α	514	0	0	514	0		0		0	0		
4/26/2014	4/26/2014		A	628	26	176	602	0	6,769	280	0	0	280		
4/27/2014	4/27/2014		A	411	24	173	387	0	7,208	421	0	0	421		
4/28/2014	4/28/2014		A	537	32	181	505	0	5,656	337	0	0	337		
5/12/2014	5/12/2014	24	A	206	22	100	184	0	4,545	485	0	0	485		
5/14/2014	5/14/2014		A	195	33	116	162	0	3,515	595	0	0	595		
5/16/2014	5/15/2014		A	80	8	112	72	0	14,000	1,400	0	0	1,400		
5/17/2014	5/17/2014	24	A	367	39	108	328	0	2,769	294	0	0	294		
5/18/2014	5/18/2014	24	A	365	35	152	330	0	4,343	416	0	0	416		
5/19/2014	5/19/2014	24	A	396	40	108	356	0	2,700	273	0	0	273		
5/20/2014	5/20/2014	24	A	382	42	156	340	0	3,714	408	0	0	408		
5/21/2014	5/21/2014	24	A	286	23	204	263	0	8,870	713	0	0	713		
5/22/2014	5/22/2014		A	350	18	271	332	0	15,056	774	0	0	774		
5/23/2014	5/23/2014		A	277	18	114	259	0	6,333	412	0	0	412		
5/25/2014	5/25/2014	24	A	238	26	117	212	0	4,500	492	0	0	492		
5/26/2014	5/26/2014		A	198	17	112	181	0	6,588	566	0	0	566		
5/27/2014	5/27/2014		A	273	22	81	251	0	3,682	297	0	0	297		
5/31/2014	5/31/2014		A	315	28	80	287	0	2,857	254	0	0	254		
6/2/2014	6/2/2014		A	379	26	60	353	0	2,308	158	0	0	158		
6/3/2014	6/3/2014		A	286	24	56	262	0	2,333	196	0	0	196		
6/4/2014	6/4/2014		A	136	13	83	123	0	6,385	610	0	0	610		
6/5/2014	6/5/2014		A	264	20	80	244	0	4,000	303	0	0	303		
6/8/2014	6/8/2014		A	323	25	175	298	0	7,000	542	0	0	542		
Averages by Co				322	24	122	298	0							

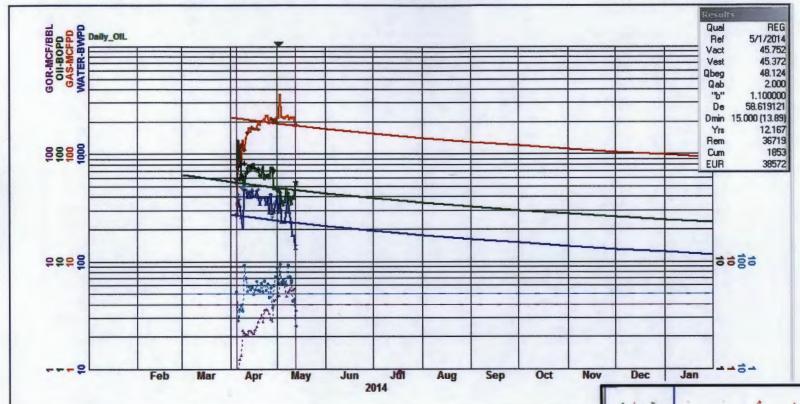
^{**} All values are recorded using imperial units.

SB ST #4 Current (YESO) performance

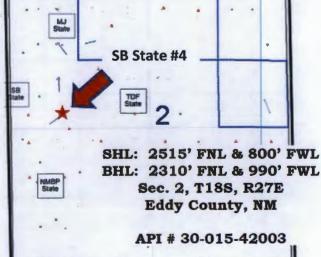
IP = 30 BOPD EUR = 27 MBO & 162 MMCF & 197 MBW



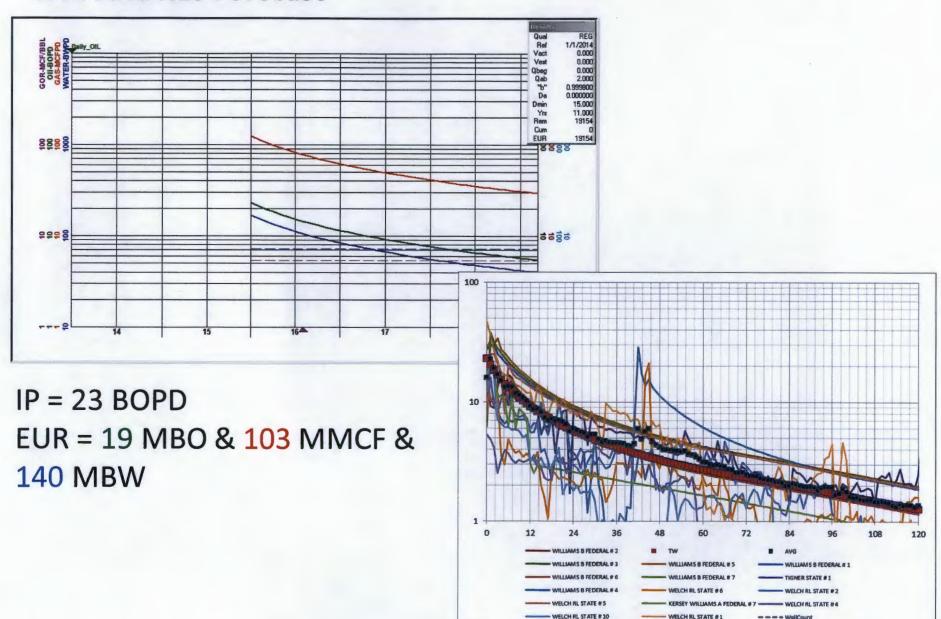
SB ST #4 Current (YESO) performance



- IP = 40 BOPD
- EUR = 39 MBO

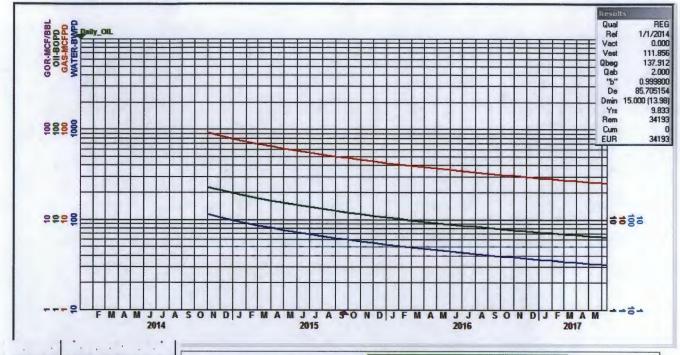


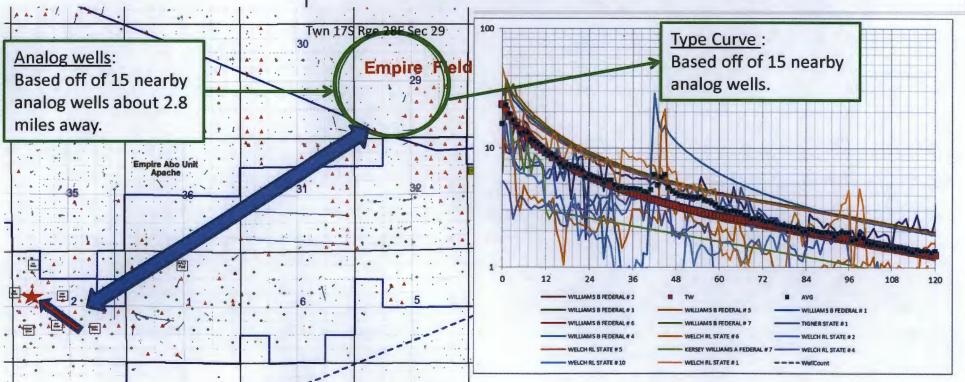
SAN ANDRES Forecast



SAN ANDRES Forecast

- IP = 23 BOPD
- EUR = 19 MBO





SAN ANDRES Offsets Detail

#	Well Name	Location	UWI	30 AVG IP [BOD]	EUR [MBO]	AVG GOR	AVG WOR	Gp	Np	Wp
1	WILLIAMS B FEDERAL # 2	S29	30015372030002	23	18	2.32	5.80	9	4	23
2	WILLIAMS B FEDERAL # 3	S29	30015347230002	37	29	3.27	9.74	5	1	14
3	WILLIAMS B FEDERAL # 5	S29	30015355450002	34	30	5.00	6.00	23	5	28
4	WILLIAMS B FEDERAL # 1	S29	30015356270002	30	28	2.63	4.57	9	3	16
5	WELCH RL STATE # 5	S28	30015373140001	25	26	2.22	8.42	11	5	40
6	WILLIAMS B FEDERAL # 6	S29	30015359000002	16	17	3.62	10.71	14	4	40
7	WILLIAMS B FEDERAL # 7	S29	30015371960001	38	29	6.49	14.73	9	1	20
8	KERSEY WILLIAMS A FEDERAL # 7	S28	30015336890001	24	11	4.11	2.47	19	5	11
9	TIGNER STATE # 1	S29	30015313870001	21	29	4.40	6.96	92	21	145
10	WELCH RL STATE # 4	S28	30015360310000	5	6	13.86	9.28	79	6	53
11	WELCH RL STATE # 2	S28	30015319170000	16	12	5.49	5.20	64	12	61
12	WELCH RL STATE # 10	S28	30015205860001	24	7	3.93	4.41	27	7	31
13	WELCH RL STATE # 6	S28	30015324560000	21	9	13.08	7.12	121	9	66
14	WELCH RL STATE # 1	S28	30015319160000	46	21	4.10	7.88	87	21	167
15	WILLIAMS B FEDERAL # 4	S29	30015351410001	29	23	6.20	6.29	60	10	60



July 16, 2014

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

RE: Downhole Commingle

SB State #4 Well (API No. 30-015-42003) Township 18 South, Range 27 East; N.M.P.M:

Section 2; SW/4NW/4 (UL E) Eddy County, New Mexico

To Whom It May Concern:

Interest ownership is common among the Yeso and San Andres Pools in the SB State #4 well, located on the above referenced lands in Eddy County, New Mexico.

Should you have any questions, please contact the undersigned at (432) 818-1878.

Sincerely,

APACHE CORPORATION

Christopher T. Lanning

Chus Lanning

Landman

(432) 818-1197 Fax

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