

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM048344

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
WILLIAMS A FEDERAL 129. API Well No.
30-015-41890-00-S110. Field and Pool, or Exploratory
ARTESIA11. County or Parish, and State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
LRE OPERATING LLCContact: MIKE PIPPIN
E-Mail: mike@pippinllc.com3a. Address
1111 BAGBY SUITE 4600
HOUSTON, TX 770023b. Phone No. (include area code)
Ph: 505-327-4573

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 29 T17S R28E SESW 0330FSL 2200FWL
32.789710 N Lat, 104.198683 W Lon**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Subsurface Commingling
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

THIS IS A REQUEST TO REMOVE THE CBP @ ~3450' & DHC.

Accepted for record
ED NMOC 7/30/15

Following the recompleat to San Andres & a test, LRE would like to drill the CBP @ ~3450' & DHC the Yeso with the San Andres. See NOI sundry ES299354.

LRE requests administrative approval to downhole commingling the existing Artesia, Glorieta-Yeso (96830) and the proposed Red Lake, Queen-Grayburg-San Andres (51300). Both intervals have common ownership, we have not experienced any significant cross flows, & all the fluids are compatible. Downhole commingling will maximize the ultimate recovery of oil & gas & eliminate redundant surface equipment. A DHC application has also been submitted to the State. See the attached DHC worksheet & supporting data. The "Williams A & B Field Study of the Yeso & San Andres" dated 11/23/2013 reviewed & approved by EGF on 1/27/2014 has been accepted by BLM CFO as justification for a

NM OIL CONSERVATION
ARTESIA DISTRICT

JUL 10 2015

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #299749 verified by the BLM Well Information System
For LRE OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by ED FERNANDEZ on 07/07/2015 (15EF0031SE)

Name (Printed/Typed) MIKE PIPPIN

Title PETROLEUM ENGINEER

Signature (Electronic Submission)

Date 04/29/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ

Title PETROLEUM ENGINEER

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ******SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Additional data for EC transaction #299749 that would not fit on the form

32. Additional remarks, continued

downhole pool commingling project on the Williams A & B Federal leases.

DOWNHOLE COMMINGLING WORKSHEET

Operator: LRE OPERATING, LLC
Lease/Well Name/API#/Location: NMNM048344, WILLIAMS A FEDERAL #12, 30-015-41890, N SEC 29 T17S R28E
Date: 4/29/2015

Data	Bottom Formation	Upper Formation	Estimated Combined Production Data
Pool Name:	Artesia, Gl-Yeso	Red Lake, Qn-Gryb-SA	(See attached weighted average calculations)
Pool Code:	96830	51300	
State Form C-102 w/dedicated Acres provided:	Yes 40 acres	Yes 40 acres	
Formation Name:	Yeso	San Andres	
Top & Bottom of Pay Section (Perfed or OH interval):	3536'-3618' Perfed	~1980'-3291' Play to Perf	
Method of Production:	Pumping	Plan to pump	
Bottom Hole Pressure:	851 psi	690 psi	
Reservoir Drive Mechanism:	Solution gas drive	Solution gas drive	
Oil Gravity &/or BTU:	35.8 / 1295*	34.1 / 1197*	34.9 / 1233
Average Sulfur Content (Wt%):	1.003*	1.2293*	1.1264
Oil Sample Analysis Provided:	Yes*	Yes*	
Gas Analysis Provided:	Yes*	Yes*	
Produce Water Analysis Provided:	Yes*	Yes*	
H2S Present:	9,500 ppm*	3500 ppm*	5720
Producing, Shut-in or New Zone:	Pumping	Plan to pump	
Date & Oil/Gas/Water rates of Last Production (new zones or no production history Operator shall attach production estimate & supporting data):	3/24/2015 15 BOPD 47 MCF/D 44 BWPD	Ave. SA From Lease 18 BOPD 80 MCF/D 204 BWPD **	Estimated Rates: 35 BOPD 140 MCF/D 250 BWPD
Average decline % (provide back up data):	OIL = 9.76%* GAS = 1.57%*	OIL = 9.51%* GAS = 5.89%*	OIL = 8.59%* GAS = 1.91%*
Fixed Allocation %: (See attached calculations)	OIL = 45% GAS = 37% WTR = 18%	OIL = 55% GAS = 63% WTR = 82%	

Remarks: *See attached back-up data & "Williams A & B Field Study of Yeso & San Andres".
** As per EGF. Pool allocations will be fine tuned after SA test.
Operator Signature:
Date: 4/29/2015

Attached Supporting Documents

State Form C-102 w/dedicated Acres Provided
 Oil Sample Analysis Provided (Must be Current)
 Gas Analysis provided (Must be Current)
 Produce Water Analysis provided (Must be Current)
 Any additional supporting data (i.e. offset well production & decline curves etc.)

* FROM WILLIAMS A & B FIELD STUDY

LRE OPERATING, LLC
WILLIAMS A FEDERAL #12
 Artesia; Glorieta-Yeso & Red Lake, Queen-Grayburg-San Andres
 N Section 29 T17S R28E
 4/29/2015
 API#: 30-015-41890

Commingle Allocation Calculations

On March 15, 2014, the Yeso (lower zone) was completed as a new well. LRE has submitted an NOI sundry (E299354) to recomple this well to the San Andres (upper zone) and produce as a single SA well to obtain a test. Following the SA test, the well will be DHC. The last Yeso production test on 3/24/15 before the recomple was 15 BOPD, 47 MCF/D, & 44 BWPD. The average San Andres test on the lease is 18 BOPD, 80 MCF/D, & 204 BWPD. As per EGF, the pool allocations will be fine tuned after the SA test.

	Upper Zone (SA)	+	Lower Zone (YESO)	=	Total
Total Oil (bbls/d)	18	+	15	=	33
Total Gas (mcf/d)	80	+	47	=	127
Total Water (bbls)	204		44	=	248

OIL

Upper Zone (SA) = 18 BOPD

Total oil = 33 BOPD

$$\% \text{ Upper Zone} = \frac{18}{33} = \underline{55\%}$$

Lower Zone (Yeso) = 15 BOPD

$$\% \text{ Lower Zone} = \frac{15}{33} = \underline{45\%}$$

GAS

Upper Zone (SA) = 80 MCF/D

Total gas = 127 MCF/D

$$\% \text{ Upper Zone} = \frac{80}{127} = \underline{63\%}$$

Lower Zone (Yeso) = 47 MCF/D

$$\% \text{ Lower Zone} = \frac{47}{127} = \underline{37\%}$$

WATER

Upper Zone (SA) = 204 BWPD

Total gas = 248 BWPD

$$\% \text{ Upper Zone} = \frac{204}{248} = \underline{82\%}$$

Lower Zone (Yeso) = 44 BWPD

$$\% \text{ Lower Zone} = \frac{44}{248} = \underline{18\%}$$

LRE OPERATING, LLC
WILLIAMS A FEDERAL #12
Artesia; Glorieta-Yeso & Red Lake, Queen-Grayburg-San Andres
N Section 29 T17S R28E
4/29/2015 – Mike Pippin
API#: 30-015-41890

WEIGHTED AVERAGES

OIL GRAVITY:

Bottom zone (Yeso) = 15 BOPD, 35.8

Upper zone (SA) = 18 BOPD, 34.1

$$(15 \times 35.8) + (18 \times 34.1) = 537.0 + 613.8 = 1150.8$$

$$1150.8 / (15 + 18) = \underline{\mathbf{34.9 \text{ GRAVITY OIL}}}$$

GAS BTU:

Bottom zone (Yeso) = 47 MCF/D, 1295 BTU

Upper zone (SA) = 80 MCF/D, 1197 BTU

$$(47 \times 1295) + (80 \times 1197) = 60,865 + 95,760 = 156,625$$

$$156,625 / (47 + 80) = \underline{\mathbf{1233 \text{ BTU GAS}}}$$

H2S in GAS:

Bottom zone (Yeso) = 47 MCF/D, 9,500 ppm

Upper zone (SA) = 80 MCF/D, 3500 ppm

$$(47 \times 9,500) + (80 \times 3500) = 446,500 + 280,000 = 726,500$$

$$726,500 / (47 + 80) = \underline{\mathbf{5720 \text{ ppm H2S}}}$$

Sulfur in Oil:

Bottom zone (Yeso) = 15 BOPD, 1.003

Upper zone (SA) = 18 BOPD, 1.2293

$$(15 \times 1.003) + (18 \times 1.2293) = 16.045 + 22.1274 = 37.1724$$

$$37.1724 / (15 + 18) = \underline{\mathbf{1.1264 \text{ Wt\% Sulfur}}}$$

District I
1625 N. Francis Drive, Hobbs, NM 88241

District II
1901 W. Grand Avenue, Artesia, NM 88213

District III
1060 Rio Pecos Road, Santa Fe, NM 87513

District IV
1220 S. W. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

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 LRE OPERATING, LLC c/o Mike Pippin LLC (agent), 3104 N. Sullivan, Farmington, NM 87401
Address

Lease WILLIAMS A FEDERAL #12 Well No N SEC 29 T17S R28E Eddy County
Unit Letter-Section-Township-Range

OGRID No. 281994 Property Code 309877 API No. 30-015-41890 Lease Type ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	RED LAKE; Queen-Grayburg-San Andres		ARTESIA; Glorieta-Yeso
Pool Code	51300		96830
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1980'-3291'		3536'-3618'
Method of Production (Flowing or Artificial Lift)	Plan to Pump		Pumping
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 15% of the depth of the top perforation in the upper zone.)	690 psi		851 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	34.8		38.32
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: RATES:	Date: Rates:	Date: 3/24/15 Rates: 15 BOPD 47 MCF/D 44 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data and explanation will be required.)	Oil Gas	Oil Gas % %	Oil Gas

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

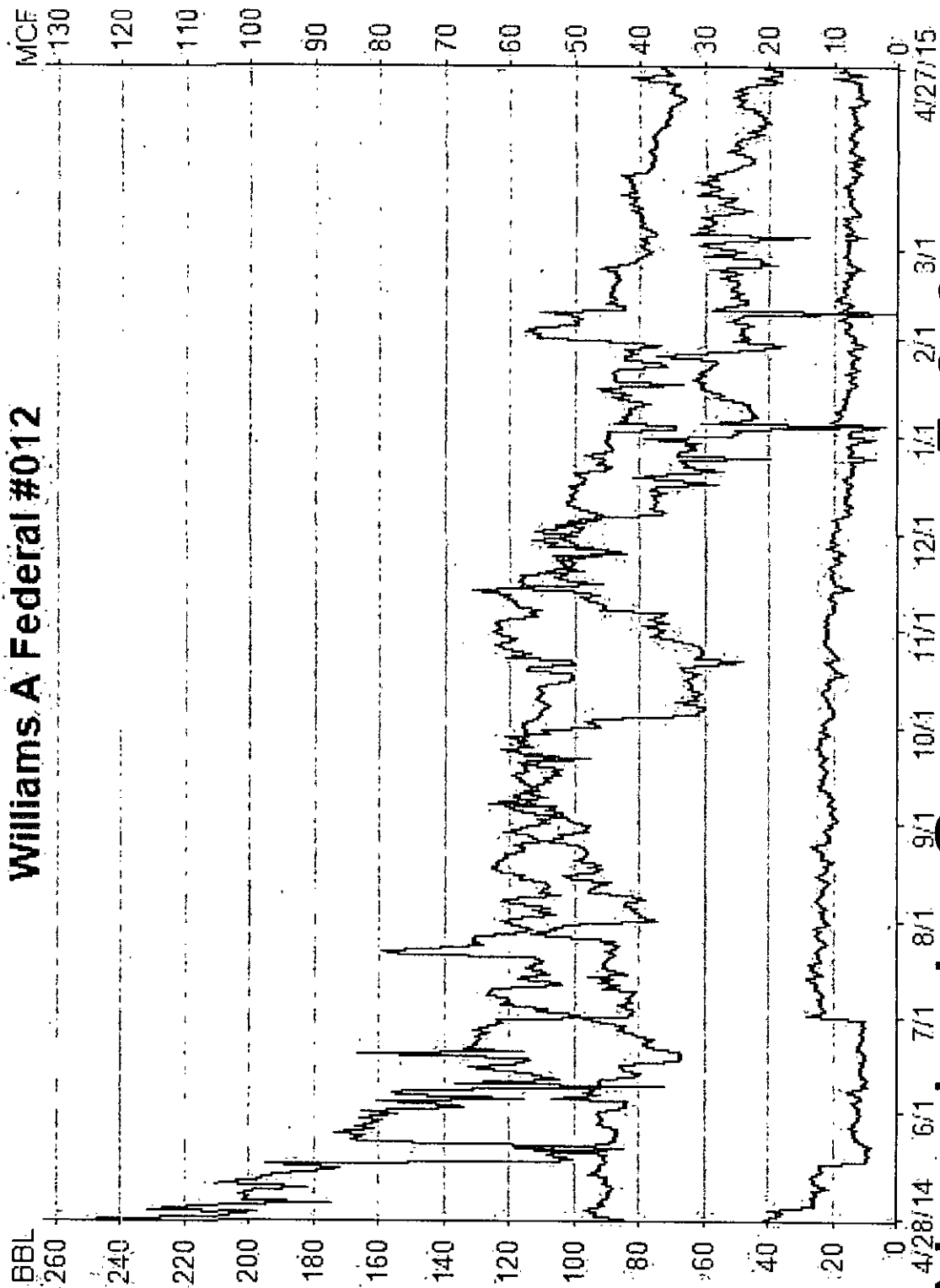
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE Petroleum Engineer - Agent DATE April 28, 2015


TYPE OR PRINT NAME Mike Pippin TELEPHONE NO. (505) 327-4573

E-MAIL ADDRESS mike@pippinllc.com

Williams A Federal #012



Neovia docConverter 5.0.0

	County: EDDY	Well Name: Williams A Federal #12	Field: Redlake	Well Sketch: AFE R15022
			Glorieta-Yeso NE	LRE Operating, LLC
	Surface Lat: 32.7987095°N	BH Lat: 32.7977067°N	Survey: S29-T17S-R28E Unit N	API # 30-015-41890
	Surface Long: 104.1986826°W	BH Long: 104.2058501°W	330' FSL & 2200' FWL	OGRID # 281994

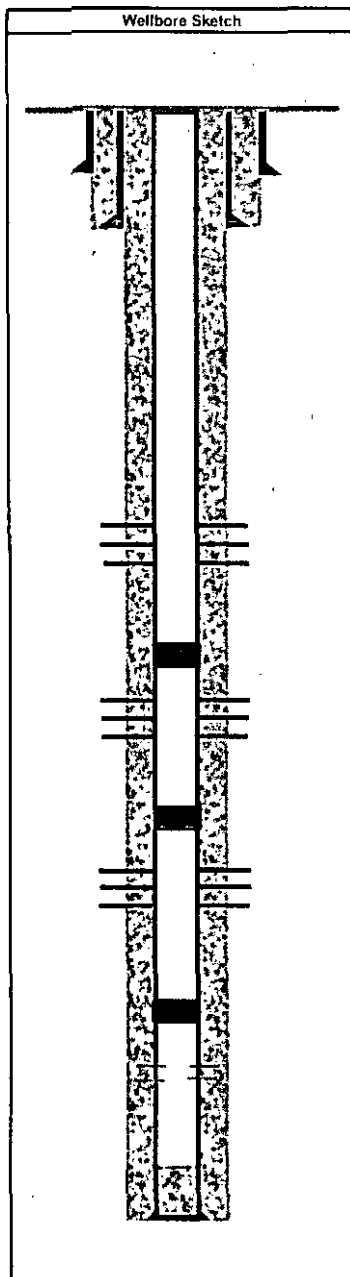
Directional Data:			
KOP	600'		
Max Dev:	28.4		
Dleg sev:	5.8		
Dev @ Perfs	0.4		
Ret to Vert:	2434'		

Tubular Data							
Tubulars	Size	Weight	Grade	Thread	TVD	MD	TOC
Conductor	14"	68.7#	B	Weld	40'	40'	SURF
Surface	8 5/8"	24#	J-55	STC	437'	437'	SURF
Intermediate							
Production	5 1/2"	17#	J-55	LTC	3,585'	3,694'	SURF
Liner							

CEMENT DATA							
	L/sks	Yld	Wt	T/sks	Yld	Wt	XS
Surface	300	1.35	14.8	NA	NA	NA	25 sx
Intermediate							
Liner							
Production	300	1.9	12.8	335	1.33	14.8	150 sx

Wellhead Data	
Type:	
WP:	
Flange:	
Thread:	
Tbg Hanger:	
8TM Flange:	
BPV Profile:	NA
Elevations:	GR - RKB = 11.8'
RKB:	3721.6
GL:	3,709.8'

Drilling / Completion Fluid	
Drilling Fluid:	10.2 PPG Brine / Salt Gel
Drilling Fluid:	
Completion Fluid:	2% KCL
Completion Fluid:	
Packer Fluid:	NA



Completion Information						
DEPTHS (MD)	FORMATION TOPS / WELL INFO	PERFORATIONS		# of HOLES		DETAILS
		from	to			
0						
40'	20" Hole					14" Conductor Pipe
437'	12 1/4" Hole					8-5/8" Surf Csg Circ 25 sx Cmt to surf
636'	Seven Rivers					
1,238'	Queen					
1,713'	Grayburg					
2,045'	San Andres					
2 7/8" tbg, TAC at 1880', SN at 3300', 4' slotted sub, 1 jt MA w BP at 3335'						
21-1" KD rods, 44- 1" KD 5 guides/rod, 24- 7/8" KD 5 guides/rod, 39- 7/8" KD rods, 4- 1.5" kbars. 2.5"x2"x20" RHBC-HVR pump						
Weatherford ALX 320-256-120 Pumping Unit- 30 HP Motor, 100" SL at 8 SPM						
	San Andres	1,980'	2,201'	32		221', 1500 g 15% HCL, 4,114 bbls water
						30,000 # 100 Mesh, 119,700 # 40/70 Ottawa
						80 + BPM
CBP at 2330'						
	San Andres	2,461'	2,779'	33		318', 1500 g 15% HCL, 6,614 bbls water
						30,000 # 100 Mesh, 271,530 # 40/70 Ottawa
						80 + BPM
CBP at 2850'						
	San Andres	2,920'	3,291'	38		371', 1500 g 15% HCL, 7,214 bbls water
						30,000 # 100 Mesh, 311,430 # 40/70 Ottawa
						80 + BPM
3,430'	Glorieta					
CBP at 3450'						
3,536'	Yeso					
	Stage 1 Yeso Frac	3,536'	3,619'	42		83' Stg1 - See Frac Design
	PBTD					above 5-1/2" Float Collar
3,694'	PROD CSG					5-1/2" Prod Csg Circ 150 SX Cmt to Surf
Comments: NM OGD CLP				Plug back Depth:		MD
				Total Well Depth:	3591' TVD	3700' MD
				Prepared By:	Date:	
				Eric McClusky	21-Apr-15	

Conditions of Approval, (Commingle SA & Yeso)

LRE Operating, LLC
Williams A - 12
API 3001541890, T17S-R28E, Sec 29
July 7, 2015

1. The "Williams A & B Field Study of the Yeso & San Andres" dated 11/23/2013 reviewed and Approved by EGF on 01/27/2014 has been accepted by BLM CFO as justification for a downhole pool comingling project on the Williams A and Williams B federal leases. The Yeso is currently capable of production in paying quantities and is to be produced until that formation's economic limits are achieved. This being said, the combined formations should increase field production.
2. A new "Well Location and Acreage Dedication Plat" (NMOCD Form C-102) is required with the notice of intent package when opening another pay zone. (received)
3. A subsequent sundry detailing work done and a completion report for the San Andres and Yeso formations is necessary.
4. Surface disturbance beyond the originally approved pad must have prior approval.
5. Closed loop system required.
6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
7. Functional H₂S monitoring equipment shall be on location.
8. 2000 (2M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels) equipment shall be installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.