

NM OIL CONSERVATION
 UNITED STATES DEPARTMENT OF THE INTERIOR
 ARTESIA DISTRICT
 BUREAU OF LAND MANAGEMENT
 JUN 02 2014

FORM APPROVED
 OMB No. 1004-0135
 Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
 NM-048344

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 #10

9. API Well No.
 30-015-40480

10. Field and Pool, or Exploratory Area
 Red Lake, Queen-Grayburg-San Andres (51300)
 Artesia: Glorieta-Yeso (96830)
 AND
 Eddy County, New Mexico

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 LRE OPERATING, LLC

3a. Address c/o Mike Pippin LLC
 3104 N. Sullivan, Farmington, NM 87401

3b. Phone No. (include area code)
 505-327-4573

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 600' FSL & 645' FWL Unit M OGRID#: 281994
 Sec. 29, T17S, R28E

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 checked="" type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other Recomplete to San Andres & DHC
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

Accepted for record
 NMOC D 105
 6-5-2014

13. Describe Proposed or Completed Operations (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 recomplate 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 recomplate 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.)

LRE would like to recomplate this Yeso oil well to the San Andres & DHC as follows: MIRUSU. TOH w/all production equipment. Set a 5-1/2" CBPs @ ~3350' & PT 5-1/2" csg & CBP to 3500 psi. (Existing Yeso perfs are @ 3403'-3585'). Perf lower SA @ ~2896'-3251' w/~33 holes. Stimulate w/~1500 gal 15% HCL acid, & frac w/~37,500# 100 mesh & ~316,875# 40/70 Ottawa sand in slick water. Set a 5-1/2" CBP @ ~2800' & PT to 3500 psi. Perf middle SA @ ~2324'-2692' w/~33 holes. Stimulate w/~1500 gal 15% HCL acid, & frac w/~37,500# 100 mesh & 316,875# 40/70 sand in slick water. Set a 5-1/2" CBP @ ~2260' & PT to 3500 psi. Perf upper SA @ ~1880'-2193' w/~31 holes. Stimulate w/~1500 gal 15% HCL acid, & frac w/~30,000# 100 mesh & 253,500# 40/70 sand in slick water. CO after frac, drill out CBPs @ 2260' & 2800', & CO to CBP @ 3350'. Land ESP @ ~1680' on 2-7/8" tbg & test SA. After both State & BLM DHC applications are approved, drill out CBP @ 3350' & land ESP @ ~1800' on 2-7/8" tbg & DHC'.

LRE requests administrative approval to downhole commingle 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 downhole pool commingling project on the Williams A & B Federal leases.

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

Name (Printed/Typed) Mike Pippin	Title Petroleum Engineer (Agent)
Signature <i>Mike Pippin</i>	Date May 1, 2014

APPROVAL BY STATE

SUBJECT TO LIKE

APPROVED

Date: *MAY 12 2014*

[Signature]

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE USE

Approved by _____ Title _____

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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.

Title 18 U.S.C. Section 1001, makes 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.

SUBJECT TO LIKE
APPROVAL BY STATE

DOWNHOLE COMMINGLING WORKSHEET

Operator:	LRE OPERATING, LLC
Lease/Well Name/API#/Location:	NM-048344, WILLIAMS A FEDERAL #10, 30-015-40480, M SEC 29 T17S R28E
Date:	5/2/2014

Data	Bottom Formation	Upper Formation	Estimated Combined Production Data
Pool Name:	Artesia, G-Y	Red Lake, Q-G-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):	3403'-3585' Perfed	1780'-3134' Perfed	
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*	34.3 / 1212
Average Sulfur Content (Wt%):	1.003*	1.2293*	1.2048
Oil Sample Analysis Provided:	Yes*	Yes*	
Gas Analysis Provided:	Yes*	Yes*	
Produce Water Analysis Provided:	Yes*	Yes*	
H2S Present:	9,500 ppm*	3500 ppm*	4259
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):	5/1/2014 9 BOPD 31 MCF/D 29 BWPD	Ave. SA From Lease 74 BOPD 176 MCF/D 185 BWPD **	Estimated Rates: 90 BOPD 210 MCF/D 220 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 = 11% GAS = 15% WTR = 14%	OIL = 89% GAS = 85% WTR = 86%	

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: 5/1/2014

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 #10
Artesia; Glorieta-Yeso & Red Lake, Queen-Grayburg-San Andres
M Section 29 T17S R28E
5/2/2014 – Mike Pippin
API#: 30-015-40480

WEIGHTED AVERAGES

OIL GRAVITY:

Bottom zone (Yeso) = 9 BOPD, 35.8

Upper zone (SA) = 74 BOPD, 34.1

$$(9 \times 35.8) + (74 \times 34.1) = 322.2 + 2523.4 = 2845.6$$

$$2845.6 / (9 + 74) = \underline{\mathbf{34.3 \text{ GRAVITY OIL}}}$$

GAS BTU:

Bottom zone (Yeso) = 31 MCF/D, 1295 BTU

Upper zone (SA) = 176 MCF/D, 1197 BTU

$$(31 \times 1295) + (176 \times 1197) = 40,145 + 210,672 = 250,817$$

$$250,817 / (31 + 176) = \underline{\mathbf{1212 \text{ BTU GAS}}}$$

H2S in GAS:

Bottom zone (Yeso) = 31 MCF/D, 9,500 ppm

Upper zone (SA) = 176 MCF/D, 3500 ppm

$$(31 \times 9,500) + (176 \times 3500) = 295,500 + 616,000 = 911,500$$

$$911,500 / (31 + 176) = \underline{\mathbf{4,259 \text{ ppm H2S}}}$$

Sulfur in Oil:

Bottom zone (Yeso) = 9 BOPD, 1.003

Upper zone (SA) = 74 BOPD, 1.2293

$$(9 \times 1.003) + (74 \times 1.2293) = 9.027 + 90.9682 = 99.9952$$

$$99.9952 / (9 + 74) = \underline{\mathbf{1.2048 \text{ Wt\% Sulfur}}}$$

LRE OPERATING, LLC
WILLIAMS A FEDERAL #10
 Artesia; Glorieta-Yeso & Red Lake, Queen-Grayburg-San Andres
 M Section 29 T17S R28E
 5/2/2014
 API#: 30-015-40480

Commingle Allocation Calculations

On 8/8/12, the Yeso (lower zone) was completed as a new well. LRE has submitted an NOI sundry to recomplate this well to the San Andres (upper zone) and produced as a single SA well to obtain a test. Following the SA test, the well will be DHC. The last Yeso production test on 5/1/14 before the recompletion was 9 BOPD, 31 MCF/D, & 29 BOPD. The average San Andres test on the lease is 74 BOPD, 176 MCF/D, & 185 BOPD. 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)	74	+	9	=	83
Total Gas (mcf/d)	176	+	31	=	207
Total Water (bbls)	185		29	=	214

OIL

Upper Zone (SA) = 74 BOPD
 Total oil = 83 BOPD
 $\% \text{ Upper Zone} = \frac{74}{83} = \underline{\underline{89\%}}$

Lower Zone (Yeso) = 9 BOPD
 $\% \text{ Lower Zone} = \frac{9}{83} = \underline{\underline{11\%}}$

GAS

Upper Zone (SA) = 176 MCF/D
 Total gas = 207 MCF/D
 $\% \text{ Upper Zone} = \frac{176}{207} = \underline{\underline{85\%}}$

Lower Zone (Yeso) = 31 MCF/D
 $\% \text{ Lower Zone} = \frac{31}{207} = \underline{\underline{15\%}}$

WATER

Upper Zone (SA) = 185 BOPD
 Total gas = 214 BOPD
 $\% \text{ Upper Zone} = \frac{185}{214} = \underline{\underline{86\%}}$

Lower Zone (Yeso) = 29 BOPD
 $\% \text{ Lower Zone} = \frac{29}{214} = \underline{\underline{14\%}}$

	County	EDDY	Well Name	Williams A Federal #10	Field:	Redlake Glorieta-Yeso NE	Well Sketch:	AFE R14009 LRE Operating, LLC
	Surface Lat:	32.799422°N	BH Lat:	N/A	Survey:	S29-T17S-R28E Unit M	API #	30-015-40480
	Surface Long:	104.203802°W	BH Long:	N/A		600' FSL & 645' FWL	OGRID #	281994

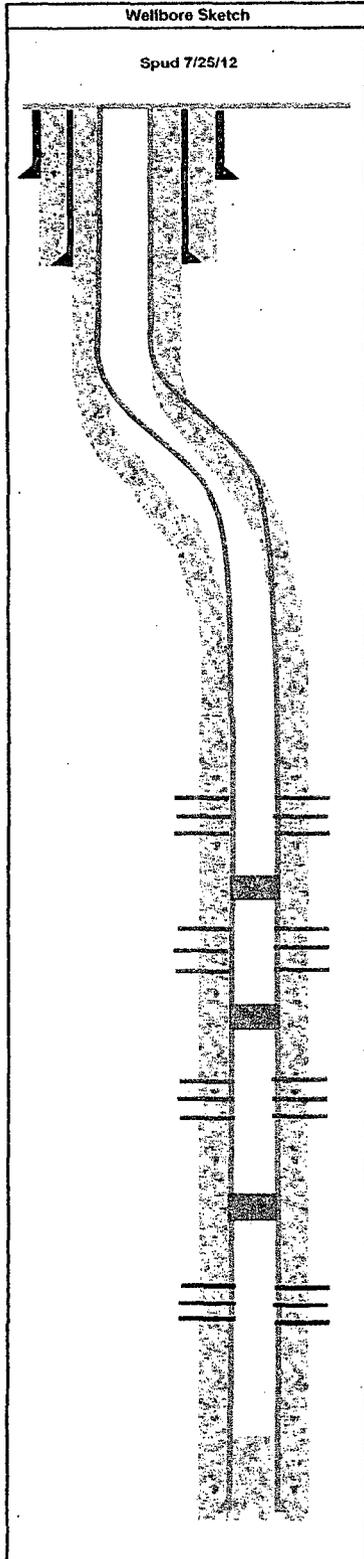
Directional Data:			
KOP	500	MD/TVD	
Max Dev.:	28.3	1100' MD	1075' TVD
Oleg sev:	10.58	1509' MD	1441' TVD
Dev @ Perfs	1.25	3494' MD	3417' TVD
Ret to Vert:	2,102	2102' MD	2025' TVD

Tubular Data							
Tubulars	Size	Weight	Grade	Thread	TVD	MD	TOC
Conductor	14"	55.5#	B	Weld	40'	40'	SURF
Surface	8 5/8"	24#	J-55	STC	434'	434'	SURF
Intermediate							
Production	5 1/2"	17#	J-55	LTC	3,743'	3,666'	SURF
Liner							

Wellhead Data	
Type:	
WP:	
Tree Cap	Flange:
	Thread:
Tbg Hanger:	
8TM Flange:	
BPV Profile:	NA
Elevations:	GR - RKB = 13.4'
RKB:	3658.4'
GL:	3,645.0'

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

CEMENT DATA							
	L/sks	Yld	Wt	T/sks	Yld	Wt	XS
Surface	350	1.35	14.8	NA	NA	NA	62 sx
Intermediate							
Liner							
Production	400	1.9	14.8	550	1.33	14.8	165 sx

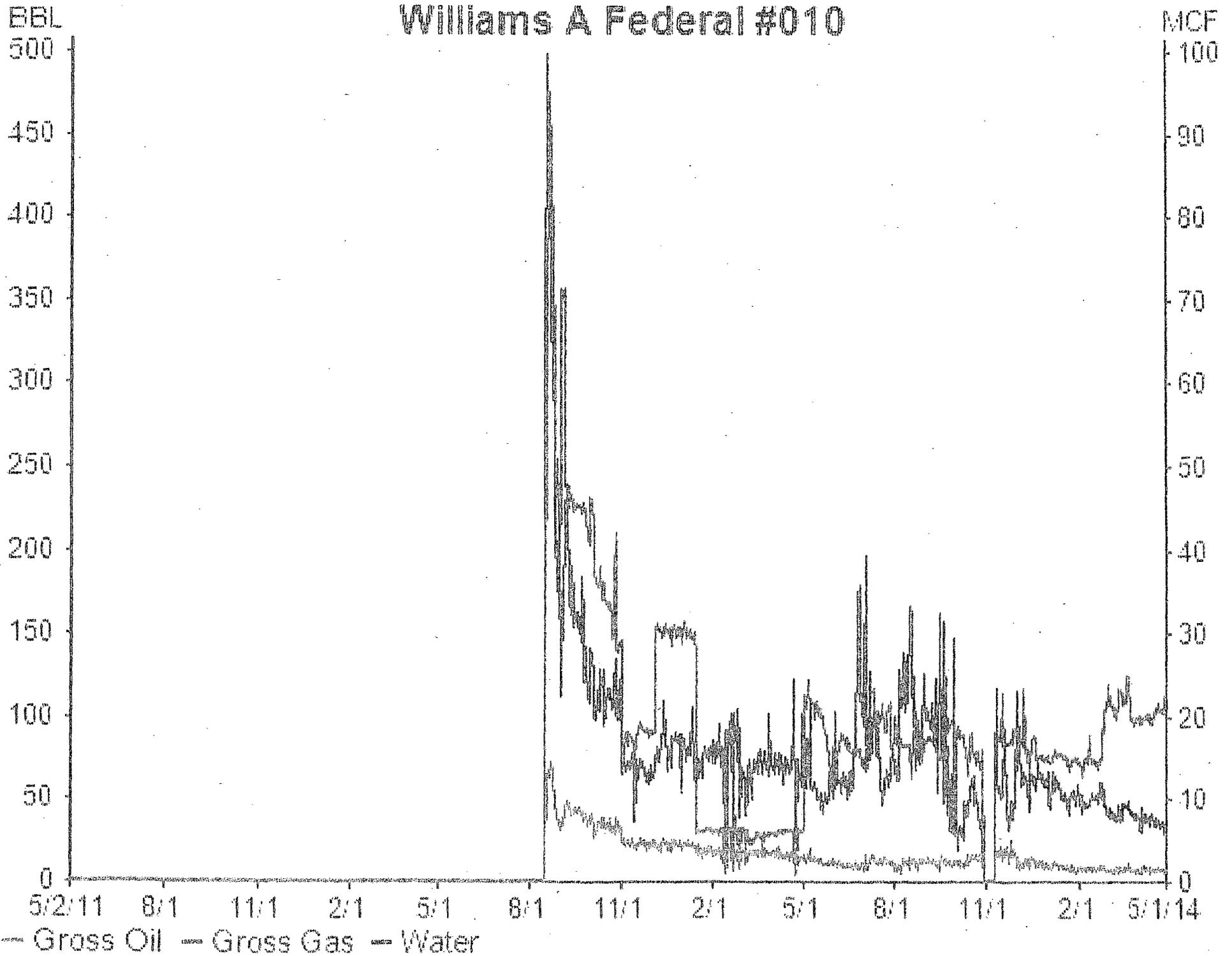


Completion Information

DEPTHS (MD)/(TVD)	WELL INFO	PERFORATIONS		# of HOLES	DETAILS
		from	to		
0					
40'	20" Hole				14" Conductor Pipe
434'	12-1/4" Hole				8-5/8" Surf Csg Circ 62 sx Cmt to surf
500'	7-7/8" hole KOP				Kick off to 5°/100'
550'/551'	7 Rivers Formation				End Build - Start 28+ Tangent
1068' / 1046'	End Build				
1143' / 1109'	Queen Formation				
1477' / 1411'	End Tangent - Start Drop				Drop - Start @ 5°/100'
1602' / 1433'	Grayburg Formation				
1875' / 1799'	Premier Sand				
1928' / 1852'	San Andres Formation				
2102' / 2025'	Return to Vertical				Return to vertical
2230' / 2152'	Middle San Andres				
2850' / 2774'	Lower San Andres				
2 7/8" - 6.5# J55 Tbg & ESP with pump intake at 1680'					
Stage #3	San Andres	1,880'	2,193'	31	313', 1500 g 15% HCL, 20,476 bbls water 30,000 # 100 Mesh, 253,500 # 40/70 Ottawa
CBP at 2260'					
Stage #2	San Andres	2,324'	2,692'	33	368', 1500 g 15% HCL, 25,595 bbls water 37,500 # 100 Mesh, 316,875 # 40/70 Ottawa
CBP at 2800'					
Stage #1	San Andres	2,896'	3,251'	33	355', 1500 g 15% HCL, 25,595 bbls water 37,500 # 100 Mesh, 316,875 # 40/70 Ottawa
3314 / 3238'	Glorieta				
3275' / 3263'	Yeso				
CBP at 3350'					
3437' / 3361'	Yeso				2000 g 7.5% HCL & 72 bioballs @ 15 BPM
	Stage 1 L. Yeso Frac	3,403'	3,586'	40	41,039 g 25# gel, 20,000 # 100 mesh, & 57,080 # 16/30 Brady, 24,615# 16/30 Resin
	(8/10/12)				
3684' / 3607'	PBDT				5-1/2" Float Collar
3743' / 3666'	PROD CSG				5-1/2" Prod Csg. Circ 30 SX Cmt to Surf

Comments: NM OCD CLP 0213203		Plug back Depth:	3607' TVD	3684' MD
		Total Well Depth:	3666' TVD	3743' MD
		Prepared By:	Date:	
		Eric McClusky	24-Apr-14	

Williams A Federal #010



— Gross Oil — Gross Gas — Water

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

District II
1501 W. Grand Avenue, Artesia, NM 88216

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

District III
1009 Rio Grande Hotel, Aztec, NM 87410

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

APPLICATION FOR DOWNHOLE COMMINGLING

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

WILLIAMS A FEDERAL #10 M SEC. 29 T17S R28E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 281994 Property Code 309877 API No. 30-015-40480 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)	~1880'-3251'		3403'-3585'
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 150% 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)	34.1		35.8
Producing, Shut-In or New Zone	Prospective 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: 5/1/14 Rates: 9 BOPD 31 MCF/D 29 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or 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
 NMOC 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: Mike Pippin TITLE Petroleum Engineer - Agent DATE May 2, 2014

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

E-MAIL ADDRESS mike@pippinllc.com

Conditions of Approval, (Commingle SA & Yeso)

LRE Operating, LLC

Williams A - 10

API 3001540480, T17S-R28E, Sec 29

May 29, 2014

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.

EF/PS

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.