Form 3160-4 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DEC 2 1 2017

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

17.500		WELL (COMPL	ETION C	OR REC	OMPLE	TION	REPOI	RT AND	LOG			ease Serial I		
2. Name of Operator	1a. Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☐ Other									6. If Indian, Allottee or Tribe Name					
SOUTHLÂND ROYALTY COMPANY ELMail: rgrigg@mspartners.com	b. Type o	f Completion			☐ Work	Over [Deepen		Plug Back	☐ Diff. I	Resvr.	7. U	nit or CA A	greem	ent Name and No.
## FORT WORTH, TX 76102															
At surface NWSW 36.965641 N Lat, 107.319504 W Lon At top prod interval reported below Sec 24 T32N R5W Mer NMP NWSW 2610FSL 897FWL 36.965641 N Lat, 107.319504 W Lon Sec 24 T32N R5W Mer NMP NWSW 2610FSL 897FWL 36.965641 N Lat, 107.319504 W Lon 12. County or Parish RIO ARRIBA 13. State RIO ARRIBA 13. State RIO ARRIBA 14. Date Spudded 11/15/2017 16. Date Completed 11/20/2017 16. Date Completed 11/20/2017 17. Elevations (DF, KB, RT, GL)* 7340 GL 17. Elevations (DF, KB, RT, GL)* 7340 GL 17. Elevations (DF, KB, RT, GL)* 17. Elevat	3. Address 400 W 7TH STREET 3a. Phone No. (include area code))	9. A	PI Well No		39-31362-00-X1	
At surface NWSW 36.965641 N Lat, 107.319504 W Lon At top prod interval reported below Sec 24 T32N R5W Mer NMP At total depth NWSW 2610FSL 897FWL 36.965641 N Lat, 107.319504 W Lon 14. Date Spudded 11/15/2017 15. Total Depth: MD 8953 8953 17. Plug Back T.D.: MD 8953 8953 19. Plug Back T.D.: MD 8891 7VD 8891 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 7340 GL 22. Was well cored? Was DST run? Directional Survey? No Yes (Submit analysis) 23. Casing and Liner Record (Report all strings set in well) Hole Size Size/Grade Wt. (#/ft.) Top (MD) Bottom (MD) Depth Depth Type of Cement (BBL) 13. State R10 ARRIBA I3. State NM 14. Date Spudded 11/120/2017 15. Date T.D. Reached 11/120/2017 16. Date Completed Date Ready to Prod. 17. Elevations (DF, KB, RT, GL)* 7340 GL 17. Elevations (DF, KB, RT, GL)* 7340 GL 17. Elevations (DF, KB, RT, GL)* 7340 GL 18. Total Depth: MD 8891 20. Depth Bridge Plug Set: MD 8740 TVD 8740 22. Was well cored? Was DST run? No MD Yes (Submit analysis) Productional Survey? No Productional Survey (MD) Productional Survey (MD) Packer Depth (MD) Productional Survey (MD) Productional S	4. Location					dance with	Federal r	equireme	ents)*						
12. County or Parish RIO ARRIBA 13. State NM 14. total depth NWSW 2610FSL 897FWL 36.965641 N Lat, 107.319504 W Lon 12. County or Parish RIO ARRIBA 13. State NM 14. total depth NWSW 2610FSL 897FWL 36.965641 N Lat, 107.319504 W Lon 16. Date Completed D & A Ready to Prod. 17. Elevations (DF, KB, RT, GL)* 7340 GL	At surface NWSW 36.965641 N Lat, 107.319504 W Lon												BASIN MANCOS Block and Survey		
14. Date Spudded 11/120/2017	Sec 24 T32N R5W Mer NMP											12. (County or P	arish	13. State
11/20/2017 18. Total Depth: MD 8953 19. Plug Back T.D.: MD 8891 20. Depth Bridge Plug Set: MD 8740 TVD 8740 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 7340 GL 22. Was well cored? Was DST run? Was DST ru	14. Date St	pudded	300 2010	/15. D	ate T.D. R		107.31	16. I	Date Comple		Prod		Elevations (DF, KI	
TVD 8891 TVD 8740 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 22. Was well cored? Was DST run? Was DST run? Directional Survey? No Yes (Submit analysis) 23. Casing and Liner Record (Report all strings set in well) Top (MD) Bottom (MD) Stage Cementer Depth No. of Sks. & Slurry Vol. (BBL) Cement Top* Amount Pulled 17.500 13.375 J-55 54.5 0 618 475 0 12.250 8.625 N-80 32.0 0 4533 1460 0 7.875 5.200 P-110 17.0 4700 8953 715 4700 7.875 5.500 P-110 17.0 4700 8953 715 4700 24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) 2.375 7946 7980 Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD)) (1	1/20/2017						
Directional Survey? No Yes (Submit analysis)			TVD	8953						891					TVD 8740
No. of Sks. & Slurry Vol. (BBL) Cement Top* Amount Pulled			ner Mecha	nical Logs R	un (Submi	copy of e	ach)			Was	DST run?		⊠ No ⊠ No ⊠ No	☐ Yes ☐ Yes ☐ Yes	s (Submit analysis) s (Submit analysis) s (Submit analysis)
Hole Size Size/Grade Wt. (#/tt.) (MD) (MD) Depth Type of Cement (BBL) Cement Top* Amount Pulled	23. Casing a	nd Liner Rec	ord (Repo	ort all strings	set in well	")									
12.250 8.625 N-80 32.0 0 4533 1460 0 7.875 5.200 P-110 17.0 4700 8953 715 4700 7.875 5.500 P-110 17.0 4700 8953 715 4700 24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD) 2.375 7946 7980 7980 Packer Depth (MD) Packer Depth (MD) Packer Depth (MD)	Hole Size	Size/G	rade	Wt. (#/ft.)									Cement 7	Гор*	Amount Pulled
7.875 5.200 P-110 17.0 4700 8953 715 4700 7.875 5.500 P-110 17.0 4700 8953 715 4700 24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD) 2.375 7946 7980	17.500	13.3	375 J-55	54.5		0	618			47	5				
7.875 5.500 P-110 17.0 4700 8953 715 4700 24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD						_					_				
24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer						_			+-		_				0
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) 2.375 7946 7980 Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD)	7.073	5.50	00 F-110	17.0	470		3933			7 1	3			4700	
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) 2.375 7946 7980 Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD)	24 57 11														
2.375 7946 7980			(D) D	aakar Danth	(MD)	Ciza	Danth Sat	(MD)	Packer D	anth (MD)	Siza	De	onth Sat (M	D) [Packer Denth (MD)
				аскег Бериг		Size	Depui Sei	(MD)		epin (MD)	Size	De	ptil Set (IVI)	racker Depth (WID)
25. Producing Intervals 26. Perforation Record	25. Produci	ing Intervals					26. Perf	oration F	Record						
Formation Top Bottom Perforated Interval Size No. Holes Perf. Status				Тор		Bottom		Perfora				$\overline{}$			
							-								
	B) PICTURED CLIFFS MANICOS				8108 8206										
D) DAKOTA 8775 8870 8153 TO 8156 0.420 4 OPEN												_			
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.				ment Squeez											
Depth Interval Amount and Type of Material		_		_					Amount a	nd Type of N	Material				
8108 TO 8206 2,000 GAL 15% HCL AND 47,001 GAL FW					AL 15% HO	CL AND 47	,001 GAL	FW							
8720 TO 8740 CIBP 8775 TO 8873 2500 GAL 15% HCI, 4916 BW, 38900# 100 MESH 73125#40/80 HYDROPRO LWC, 27180# 30/50 CRC					AL 15% HC	1 4916 BV	V 38900#	100 MES	H 73125#40)/80 HYDRO	PROLWC	27180	0# 30/50 CF	RC.	
8775 TO 8873 2500 GAL 15% HCI, 4916 BW, 38900# 100 MESH 73,125# 40/80 HYDROPRO LWC, 27,180# 30/50 CRC															
28. Production - Interval A	28. Product														
Date First											ty	Producti	on Method		
A 11/20/2017 12	Α	11/20/2017	12		0.0	256.0		6.0					FLOV	VS FR	OM WELL
Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Ratio Well Status Flwg. 200 Press. Rate BBL MCF BBL Ratio								100		Well S	Status				
42/64 SI 500.0 0 512 472 PGW	42/64				0	512	4	72			PGW				
28a. Production - Interval B				Tm	lon .	T ₀	T ₁₁₁	1-		I a		p :			
Date First Test Hours Test Oil Gas Water Oil Gravity Gas Production Method Tested Production BBL MCF BBL Corr. API Production Method Gravity					mar Bull	Lias	Water	10	ni Ciravity	(ias		rroducti	on Method		
Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water BBL Gas:Oil Ratio Size Flwg. SI	Date First	Test Date									ty				

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #397998 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

280. Progu	uction - Inter	val C	-								
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity		Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Sta	tus	·	
28c. Produ	action - Interv	/al D	. .		1						
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity		Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Stat	tus		
	sition of Gas(URED	Sold, used	for fuel, vent	ed, etc.)			•				
Show a	all important	zones of		ontents there		d intervals and all			31. Fo n	nation (Log) Markers	
	Formation		Тор	Bottom		Descriptions	, Contents, etc			Name	Top Meas. Depth
FRUITLAN PICTUREI MANCOS DAKOTA			3842 4056 8108 8775	8206 8870				·			
		·									:
										·	- :
				·							
32. Additi	onal remarks TIONAL PEI	(include j	olugging proce	edure): :D:		٠.			-	·	· · · · · · · · · · · · · · · · · · ·
00001	00000 4 40	DIA ALL	OLES, OPEI OLES, OPEI								
24 TO	TAL HOLES	S								·	
	enclosed atta		s (1 full set re	ald)		2. Geologic R			ST Rep	·	Directional Survey
		_	g and cement	• '		6. Core Analy	•	7 O	-	7. L	onectional survey
34. I hereb	by certify that	the foreg	Electr	onic Subm	ission #39	mplete and corre 07998 Verified b YALTY COMP	y the BLM W	ell Informat	tion Sys		structions):
Name	(please print)	ROBBIE	Committee	to AFMS	for proc	cessing by JACk	SAVAGE or	12/14/2017	(18JW	S0038SE) DRY REPORTING	
				22)							
Signat	am	(⊏iectro	nic Submissi	on)			Date 1	2/13/2017			

Additional data for transaction #397998 that would not fit on the form

26. Perforation Record, continued

Perf Interval	Size	No. Holes	Perf Status
8775 TO 8789	0.420	14	
8775 TO 8789	0.420	14	
8826 TO 8840	0.420	14	
8826 TO 8840	0.420	14	
8858 TO 8870	0.420	12	
8858 TO 8870	0.420	12	•