State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary

Todd E. Leahy, JD, PhD Deputy Secretary

Adrienne Sandoval, Division Director **Oil Conservation Division**



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 3/12/2020

Well information:

30-039-05648 CLARK #003

SAN JUAN RESOURCES, INC

Application Type:
P&A Drilling/Casing Change Location Change
Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)
Other:
Conditions of Approval:

- Notify NMOCD 24 Hours prior to commencing activities
- In addition to the BLM approved plugs
- Include a plug 1500-1400/ OCD Nacimiento pick @ 1450.'
- Include a plug 3053-2705. BLM Kirtland pick @ 3003,' OCD Ojo Alamo pick @ 2755.'

NMOCD Approved by Signature

Date

5/29/2020

Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Received 4/30/2020 FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS					5. Lease Serial No. NMNM03011	,	
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.				If Indian, Allottee or Tribe Name If Unit or CA/Agreement, Name and/or No. Well Name and No. CLARK 3			
SUBMIT IN TRIPLICATE - Other instructions on page 2 1. Type of Well Oil Well Gas Well Other							
							2. Name of Operator SAN JUAN RESOURCES INC
3a. Address 1499 BLAKE STREET, SUITE DENVER, CO 80202)	10. Field and Pool or Exploratory Area S BLANCO					
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description	Fx: 505-327			11. County or Parish, S	State	
Sec 5 T24N R3W SENW 1730 36.342418 N Lat, 107.183596					RIO ARRIBA COUNTY, NM		
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICAT	TE NATURE O	F NOTICE,	REPORT, OR OTH	IER DATA	
TYPE OF SUBMISSION			TYPE OI	F ACTION			
Notice of Intent ■ Notice of Intent Notice of Inten	☐ Acidize	☐ Deep	en	☐ Product	ion (Start/Resume)	☐ Water Shut-Off	
_	☐ Alter Casing	☐ Hydi	aulic Fracturing	□ Reclam	ation	■ Well Integrity	
☐ Subsequent Report	□ Casing Repair	□ New	Construction	☐ Recomp	olete	☐ Other	
☐ Final Abandonment Notice	☐ Change Plans	☑ Plug	and Abandon	□ Tempor	arily Abandon		
	☐ Convert to Injection	☐ Plug	Back	■ Water I	Disposal		
following completion of the involved testing has been completed. Final Al determined that the site is ready for f San Juan Resources request plan attached.	pandonment Notices must be fil inal inspection. the plugging of the Clark	ed only after all r	equirements, includ	ling reclamatio	n, have been completed a		
14. I hereby certify that the foregoing is	Electronic Submission #		I by the BLM We		System		
	committed to AFMSS for pro				OSS0001SE)		
Name(Printed/Typed) VANESSA FIELDS			Title AGENT	/REGULAT	ORY MANAGER		
Signature (Electronic S	Submission)		Date 03/12/2	020			
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE		
_Approved By_JOE KILLINS			TitlePETROLE	UM ENGIN	EER	Date 04/30/2020	
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conduct the conductive conductive conductive conductive conductive conductive conductive cond		Office Rio Pue	rco				
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent					ake to any department or	agency of the United	

ΚP

BLM FLUID MINERALS Geologic Report

Date Completed: 4/17/20

Well No.	Clark # 3		Location	1730′	FSL	&	1550′	FWL	
Lease No.	NMNM03011		Sec. 5	,	T24N			R3W	
Operator	San Juan Resor	San Juan Resources		Rio Arriba State		State	te New Mexico		
Total Depth	3367′	PBTD 3354'	Formation	Blanco Pictured Cliffs South					
Elevation (GL)	Elevation (GL) 7030'			Elevation (KB) 7042' (est.)					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm			Surface	2178′	Surface/Fresh water sands
Nacimiento Fm			2178′	2801'	
Ojo Alamo Ss			2801'	3003"	Aquifer (fresh water)
Kirtland Shale			3003"	3071′	
Fruitland Fm			3071′	3278′	Coal/Gas/Possible water
Pictured Cliffs Ss			3278′	3344′	Gas
Lewis Shale			3344′		
Chacra					Probable water or dry
Cliff House Ss (main)					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					Source rock
Gallup					O&G/Water
Dakota					O&G/Water

Remarks:

P & A

- Please ensure that the tops of the Pictured Cliffs and Fruitland formations as well as the entire Ojo Alamo aquifer, identified in this report, are isolated by proper placement of cement plugs. This will protect the freshwater sands in this well bore.

Please note that the BLM geologist's picks for the Nacimiento, Ojo Alamo, and Kirtland formations vary significantly from the operator's picks. The Fruitland varies slightly.

Reference Well:

1) San Juan Operating Fm. Tops Clark # 10 990' FNL, 600' FWL T24N, R3W, Sec 5 GL= 7112'

Prepared by: Walter Gage

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

Attachment to notice of Intention to Abandon:

Re: Permanent Abandonment

Well: Clark 3

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
- 3. Submit electronic copy of the CBL for verification to the following addresses: jkillins@blm.gov, jhoffman@blm.gov and Brandon.Powell@state.nm.us.

 Based on CBL review inside/outside plugs and volumes may be adjusted accordingly. Please review the General Requirements document to ensure volumes meet required excess inside and outside casing.
 - a. BLM tops are based on the attached geologic report. Plugs will be adjusted based on cement coverage indicated by the CBL. Do not proceed with any additional plugging operations prior to reviewing CBL results with BLM and confirming plug depths.
- All plugs must cover 50 feet above and below indicated formation. Minimum inside plug 100 feet plus 50 feet excess cement. See attached BLM geologic report.
 - a. BLM Fruitland formation top (3071 ft md). Modify Plug 1: 3236 3021 ft
 - b. BLM Ojo Alamo formation top (2801 ft md). Plug: 2851 2751 ft
- 5. Minimum surface plug is 50 feet deeper than surface casing to surface. Perforate production casing at least 216 feet or deeper for surface plug.

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

- 1.0 The approved plugging plans may contain variances from the following <u>minimum general</u> requirements.
 - 1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.
 - 1.2 Requirements may be added to address specific well conditions.
- 2.0 Materials used must be accurately measured. (densometer/scales)
- 3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.
 - 3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.
- 4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.
 - 4.1 The cement shall be as specified in the approved plugging plan.
 - 4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.3 Surface plugs may be no less than 50' in length.
 - 4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.
 - 4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

- 5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.
 - 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
 - 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
 - 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
 - 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.
- 6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.
 - 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
 - 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.
- 7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S .
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.
- 9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

Form 3 160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0135 Expires Jnovember 30, 2000

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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.

NM-03011
6. If Indian, Allottee or Tribe Name

5. Lease Serial No.

abandoned well.	Use Form 3160-3 (APD)	for such proposals.					
SUBMIT IN TRIPLICATE – Other instructions on reverse side					/Agreement, Name and/or N		
1. Type of Well	_						
Oil Well Gas Well		8. Well Name and No.					
2. Name of Operator			ļ-	Clark #3			
San Juan Resources, Inc 3a. Address		9. API Well No. 30-039-05648					
1499 Blake Street, Suite 10C. I	Denver Co 80202	3b. Phone No. (include of 303-573-6333		10. Field and Pool, or Exploratory Area			
4. Location of Well (Footage, Sec.,					Pictured Ciffs		
1730' FNL & 1550' FWL; Se				11. County or Parish, State			
				Rio Arriba C	ounty, NM		
12. CHECK APPR	OPRIATE BOX(ES) TO IN	DICATE NATURE OF 1	NOTICE, REP	ORT, OR OTH	ER DATA		
TYPE OF SUBMISSION		ТҮРЕ С	F ACTION				
Alter Casing Fracture Treat Reclamation Well Inte					Water Shut-Off Well Integrity Other		
Change Plans							
Describe Proposed or Completed Ope. If the proposal is to deepen direction Attach the Bond under which the wo Following completion of the involved Testing has been completed. Final addenmined that the site is ready for fin	at inspection.)				shall be filed within 30 days rm 3160-4 shall be filed once impleted, and the operator has		
	×				•		
14. I hereby certify that the foregoing Name (Printed/Typed) Kyle T	g is true and correct . Mason	Title Agent fo	or Walsh En	gineering and	d Production		
Signature Date January 1/8/2020							
7 70	THIS SPACE	FOR FEDERAL OR STA					
Approved by		Title	- Indiana and A	Date			
Conditions of approval, if any, are attached certify that the applicant holds legal or equ	uitable title to those rights in the su	warrant or bject lease					
white would entitle the applicant to conduct Title 18 U.S.C. Section 1001, mal States lightious or fraudulent state	ke it a crime for any person l	knowingly and willfully to any matter within its j	to make to any urisdiction.	department or	agency of the United		

P&A Procedure

Clark #3

S. Blanco Pictured Cliffs

1730' FNL & 1550' FWL, Section 5, T24N, R3W

Rio Arriba County, New Mexico, API #30-039-05648

Plug & Abandonment Procedure:

Note: All cement volumes use 100% excess outside casing and 50' excess inside pipe. Stabilizing wellbore fluid will be 8.33 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Class G neat 1.15 ft³/sk or equivalent. Plugs determined from Calculated TOC @1993'.

Prior to Mobilization

- 1. Notify BLM & NMOCD
- 2. Verify all cement volumes based on actual slurry to be pumped. Calculations based on 1.15 ft³/sk.
- 3. Comply with all COA's from BLM and NMOCD

P&A Procedure

- 1. MIRU PU and cement equipment
- 2. ND WH, NU BOP, RU rig floor and 2-3/8" handling tools
- 3. POOH and LD 2-3/8" production string set at 3338'
- 4. RIH w/ casing scrapper to 3250'
- 5. TIH with 2-3/8" work string and set 5-1/2" CICR set @ 3236'
- Roll well and pressure test tubing to 1000 psi, close pipe rams and pressure test casing to 500 psi to determine if plug tags will be required.
- **7.** Run CBL once hole is rolled to determine TOC. (Plugs based on calculated TOC from primary cement job)
- 8. Plug #1, 3120' 3236' (Pictured Cliffs Top 3284', Fruitland Top 3170' Perfs: 3286' 3348'): Mix & pump 16 sxs (18.4 ft³) of Class G neat cement (or equivalent) on top of retainer in balanced plug. PU 100' above TOC and reverse circulate tubing clean. Tag plug if required.
- 9. TOOH and LD tubing to ~2500'
- 10. Plug #2, 2205' 2455' (Kirtland Top 2405', Ojo Alamo Top 2255'): Mix & pump 30 sxs (34.5 ft³) of Class G neat cement (or equivalent) in balanced plug. PUH 100' above TOC and reverse circulate tubing clean. Tag plug if required.
- 11. TOOH and LD tubing
- 12. RIH w/ WL and shoot 3 spf at 180'
- **13.** Attempt to establish circulation down 5-1/2" to annulus. Re-shoot if necessary.

- 14. Plug #3, Surface 166' (9 5/8" surface shoe) Once circulation is established Mix & pump 89 sxs (101 ft³) of Class G neat cement (or equivalent) until cement returns are observed through annulus. Top off as necessary.
- 15. ND BOP and cut off wellhead below surface casing flange, top off casing and annulus as necessary. Install P&A marker and cut off and/or remove anchors. RD, MOL - Restore location per BLM stipulations.

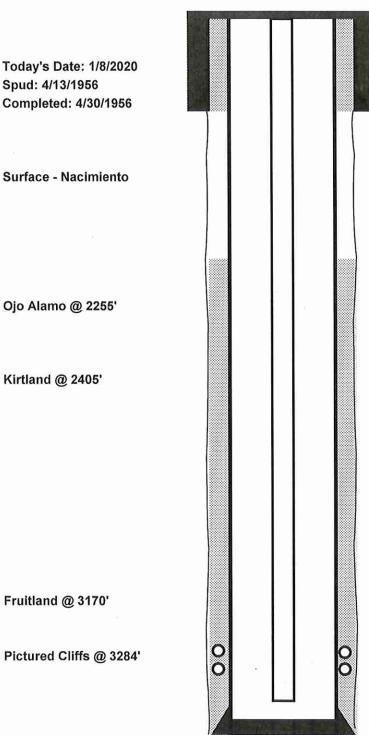
Kyle T. Mason District Engineer

San Juan Resources

Clark #3

Current WBD

South Blanco Pictured Cliffs 1730' FNL & 1550' FWL, Section 5, T24N, R3W, Rio Arriba County, NM API #30-039-05648



Surface Casing

Elevation: 7037' GL

Hole Size: 12 1/4"

9 5/8", __#, Casing set @ 166' Cement w/ 125 sk, Unknown TOC

Production Casing

Hole Size: 6-3/4"

5-1/2", 14#, casing set @ 3368 KB' Cement w/ 100 sk - Calc TOC = 1993' Pictured Cliffs Perfs: 3286' - 3348'

Production Tubing

2 3/8" 4.7# tubing set @ 3338'

PBTD: 3368' TD: 3368'

San Juan Resources

Clark #3

Proposed P&A

South Blanco Pictured Cliffs 1730' FNL & 1550' FWL, Section 5, T24N, R3W, Rio Arriba County, NM API #30-039-05648

Today's Date: 1/8/2020

Spud: 4/13/1956

Completed: 4/30/1956

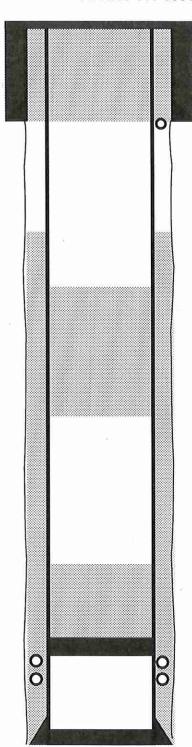
Surface - Nacimiento

Ojo Alamo @ 2255'

Kirtland @ 2405'

Fruitland @ 3170'

Pictured Cliffs @ 3284'



Surface Casing

Elevation: 7037' GL

Hole Size: 12 1/4"

9 5/8", __#, Casing set @ 166' Cement w/ 125 sk, Unknown TOC

Production Casing

Hole Size: 6-3/4"

5-1/2", 14#, casing set @ 3368 KB' Cement w/ 100 sk - Calc TOC = 1993' Pictured Cliffs Perfs: 3286' - 3348'

Production Tubing

2 3/8" 4.7# tubing set @ 3338'

Plug #3: Surface - 166' - (9 5/8" surface casing shoe)

Class G neat, 101 sxs (116.15 ft³)

Plug #2: 2205' - 2455'

Spot Class G neat, 30 sxs (34.5 ft³)

Plug #1: 3120 ' - 3236'

Spot Class G neat, 16 sxs (18.4 ft³)

Set CICR at 3236'

PBTD: 3368' TD: 3368'