

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTOCD Received  
8/3/2020FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**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.  
NMNM99735

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
SYNERGY 21-7-7 1369. API Well No.  
30-043-21022-00-S110. Field and Pool or Exploratory Area  
BASIN FRUITLAND COAL11. County or Parish, State  
SANDOVAL COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other: COAL BED METHANE

2. Name of Operator

SYNERGY OPERATING, LLC

Contact: GLEN PAPP

E-Mail: gpapp@synergyoperating.com

3a. Address

FARMINGTON, NM 87499

3b. Phone No. (include area code)

Ph: 505-599-4908 Ext: 1582

Fx: 505-599-4900

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

Sec 7 T21N R7W NWSE 1835FSL 1970FEL  
36.064014 N Lat, 107.615178 W Lon**12. CHECK THE 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"/> Hydraulic Fracturing	<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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Synergy Operating LLC plans to plug and abandon the subject well.

Attached are the follow documents:

- 1) Wellbore plugging plan
- 2) Reclamation plan

Notify NMOCD 24hrs  
Prior to beginning  
operations

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

**Electronic Submission #519474 verified by the BLM Well Information System  
For SYNERGY OPERATING, LLC, sent to the Farmington  
Committed to AFMSS for processing by JOE KILLINS on 06/22/2020 (20JK0689SE)**

Name (Printed/Typed) THOMAS MULLINS

Title ENGINEERING MANAGER/PARTNER

Signature (Electronic Submission)

Date 06/18/2020

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By JOE KILLINS

Title ENGINEER

Date 07/28/2020

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 Farmington

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.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

AV

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**

Well: 136 SYNERGY 21-7-7

API: 30-043-21022-00-S1

**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. If casing fails to test contact BLM Engineering. No changes are to be made to this approved Sundry without prior approval from the BLM.
4. A Subsequent Report Sundry Notice (Form 3160-5) must be submitted within 30 days after plugging operations are complete.

**BLM FLUID MINERALS  
Geologic Report**

**Date Completed:** 7/16/2020

Well No.	Synergy 21-7-7 #136		Location	1835	FSL	&	1970	FEL
Lease No.	NMNM-99735		Sec. 07	T21N			R07W	
Operator	Synergy Operating		County	Sandoval		State	New Mexico	
Total Depth	764	PBTD 736	Formation Fruitland Coal (target), Pictured Cliffs (TD)					
Elevation (GL)	6606		Elevation (KB) 6617					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/Fresh water sands
Nacimiento Fm					Fresh water sands
Ojo Alamo Ss			Surface	176	Aquifer (fresh water)
Kirtland Shale			176	318	
Fruitland Fm			318	764	Coal/Gas/Possible water
Pictured Cliffs Ss			764	PBTD	Gas
Lewis Shale					
Chacra					
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					
Gallup					O&G/Water
Graneros Shale					
Dakota Ss					O&G/Water

Remarks:  
P & A

- Log analysis of reference well #2 (attached worksheet) indicates the Ojo Alamo sands investigated contain fresh water ( $\leq 5,000$  ppm TDS).
- Plugging plan has entire casing filled with cement, which will protect fresh water sands in the well bore.
- Perforations @ 536'-554'. CIBP @ 525'.

Reference Well:

1) Same	Fm. Tops
2) M & M Production Socorro 21-7-10 #34 330' FSL, 2200' FEL Sec. 10, T21N, R07W GL 6771', KB 6783'	Water Analysis

Prepared by: Chris Wenman

**U.S. Department of the Interior  
Bureau of Land Management**

**Wellbore Plugging Plan**

**Synergy Operating, LLC**

**Synergy 21-7-7 # 136  
Plugging & Final Abandonment**

**Prepared by:**

**Thomas E. Mullins, P.E.  
Partner / Engineering Manager**

**June 2020**

**Submitted Electronically**

**To: U.S. Department of the Interior-BLM  
Farmington District – FFO  
Farmington, NM 87402**

## Well Information:

<b>Well Name &amp; #:</b>	Synergy 21-7-7 # 136
<b>API #:</b>	30-043-21022
<b>Legal Location:</b>	1835' FSL, 1970' FEL, Unit J, Section 7 – T21N-R07W, Sandoval County, NM
<b>Latitude/Longitude:</b>	36.06402 / -107.61515
<b>Federal Lease #:</b>	NMNM-99735
<b>USGS Topo Map:</b>	Lybrook SE
<b>Drilling Spud date:</b>	June 17, 2006
<b>TD / PBTD:</b>	764' / 736'
<b>Surface Hole Size:</b>	12-1/4"
<b>Surface Casing:</b>	8-5/8" 24# J-55 @ 138' Cmt'd w/ 125-sxs Type V cmt – Circ 20 bbls to surface
<b>Production Hole Size:</b>	7-7/8"
<b>Production Casing:</b>	5-1/2" 15.5# K-55 @ 764' Cmt'd w/ 44 sxs (90.3 ft3) Type 5 Lead and 144 sxs (190 ft3) Type 5 Tail Cement – Circulated 20 bbls to surface
<b>Perforations:</b>	Fruitland Coal: 536' to 554' (18') – 88 holes
<b>Tubing in Hole:</b>	21 Jts – 2-7/8" 6.5# J-55 w/ SN & MA, EOT @ 672'
<b>Formation Tops (KB):</b>	Fruitland @ 176', Pictured Cliffs @ 764'

## Project Summary:

Synergy Operating, LLC ("Synergy") is the operator of the Synergy 21-7-7 # 136 well. A Fruitland Coal gas well. Synergy is submitting a Notice of Intent to Abandon (NIA) to the BLM to permanently plug and abandon the well and reclaim the surface disturbances.

No Cement Bond Log is planned to be run, due to all casing strings being cemented and circulated to surface.

Multiple Wells will be cemented to surface in a single day, utilizing 1" PVC tubing run (rigless) and cemented inside the 5-1/2" Production Casing. A rig will be required to remove the 2-7/8" tubing from the well. A Cast Iron Bridge Plug will be set above the existing Perforations (536' to 554').

Two (2) previous Sundry Notices have been submitted on this well that have not been returned by the BLM. The first was submitted on July 29, 2019, and the second was submitted on 10/31/2019.

The NIA will be submitted on the Sundry Notices and Reports on Wells, Form 3160-5.

## **Proposed wellbore plugging procedure:**

MIRU SERVICE RIG. RD HORSE'S HEAD. UNSEAT DH PUMP AND COOH LAYING DOWN ROD STRING AND DH PUMP

(Polish rod, 2' pony, 8' pony, 20 - 7/8" rods, 4 - 1.5" sinker bars & DH pump). ND WH. NU BOPE.

COOH laying down 21 jts -

2-7/8" 6.5# tubing from 672'. RU wireline. Correlate w/ GR-CCL. PERFORATIONS 536' TO 554'. RIH AND SET CIBP @ 525'.

POOH. RDMO RIG. LOAD HOLE W/ WATER TRUCK. TEST 5-1/2" CASING TO 550#. CHART PRESSURE TEST. RELEASE

PRESSURE. RIH W/ 1" POLY PIPE AND TAG CIBP @ 525'. PULL UP. MIRU CEMENT PUMP TRUCK AND CIRCULATION TANK

MIX AND PUMP 12.5 BBLS CLASS G NEAT CEMENT AT 15.5 PPG (70.16 FT<sup>3</sup> / 59 SXS @ 1.18 YIELD). FILLING ENTIRE CASING

WITH CEMENT TO SURFACE. CUT OFF WELLHEAD AND INSTALL ABOVE GROUND DRY-HOLE MARKER.

REMOVE ALL SURFACE EQUIPMENT AND TANK BATTERY. RIP LOCATION AND RECONTOUR PER BLM CONSULTATION.

RESEED SURFACE LOCATION AND SUBMIT FOR FINAL ABANDONMENT APPROVAL.

## **Wellbore diagrams:**

Attached are simple wellbore schematics of the well before and after the above well work is completed.

SYNERGY # 136 P&A

**SYNERGY 21-7-7 # 136**

Unit J, Section 07-T21N-R07W  
1835' FSL, 1970' FEL  
6606' GL, 6611' KB

Steve & Son Rig # 1 Spud: 06/17/2006  
Completed: 01/10/2007

**API # 030-043-21022**

36.06402 deg North, 107.61515 deg West

**8-5/8" 24# K-55 Casing @ 138' w/ 125 sxs**  
**Circulated 20 bbls cement to surface**

Dev Surveys	
196'	1.0 Deg
732'	1.0 Deg

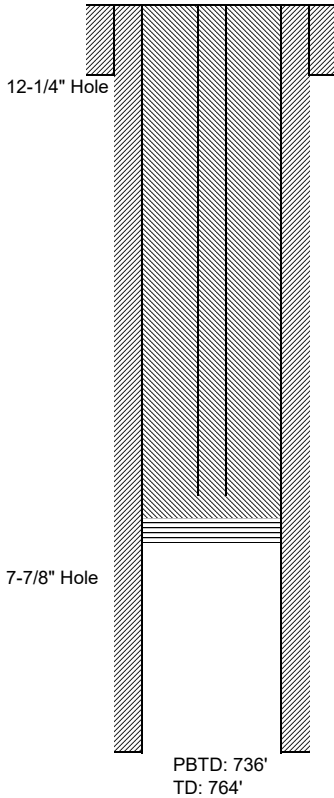
1" PVC Coiled Pipe will be run in the well to tag the CIBP @ 525'  
This will be cemented in the hole cementing the entire wellbore with 59 sxs (70.16 ft3)  
Class G Neat Cement to surface.

No Cement Bond Log will be run, due to the shallow depths and full cement circulation on all casing strings.

**5-1/2" CIBP @ 525' - Wireline Set**

**Fruitland Coal Perforations**  
536' to 554' - 18 feet (88 holes)

**5-1/2" 15.5# K-55 LT&C Casing @ 764', w/ 44 sxs (90.3 ft3) Lead Type 5 cement @ 12.5 ppg**  
**tail with 144 sxs (190 ft3) Type 5 @ 15.5 ppg. Good Circulation, Circulate 20 bbls to surface**



Formation Tops	
San Jose	
Nacimiento	
Ojo Alamo	
Kirtland	138'
Fruitland	176'
Pict Cliffs	764'
TD:	764'

SYNERGY # 136

**SYNERGY 21-7-7 # 136**

Unit J, Section 07-T21N-R07W  
1835' FSL, 1970' FEL  
6606' GL, 6611' KB

Steve & Son Rig # 1 Spud: 06/17/2006  
Completed: 01/10/2007

**API # 030-043-21022**

36.06402 deg North, 107.61515 deg West

**8-5/8" 24# K-55 Casing @ 138' w/ 125 sxs**  
**Circulated 20 bbls cement to surface**

**Dev Surveys**

196' 1.0 Deg  
732' 1.0 Deg

**Tubing**

21 Joints - 2-7/8" 6.5# J-55 Tubing @ 672' KB, SN up 1 jt

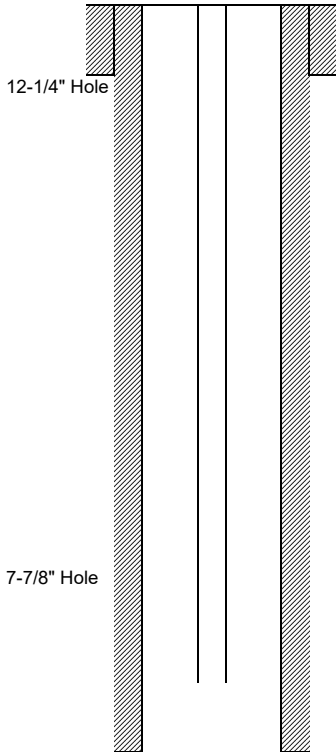
**Rods**

4 - 1.5" Sinker Bars, 20 - 7/8" Rods, 8' and 2' Pony

**Fruitland Coal Perforations**

536' to 554' - 18 feet (88 holes)

**5-1/2" 15.5# K-55 LT&C Casing @ 764', w/ 44 sxs (90.3 ft3) Lead Type 5 cement @ 12.5 ppg**  
**tail with 144 sxs (190 ft3) Type 5 @ 15.5 ppg. Good Circulation, Circulate 20 bbls to surface**



PBTD: 736'  
TD: 764'

**Formation Tops**

San Jose	
Nacimiento	
Ojo Alamo	
Kirtland	138'
Fruitland	176'
Pict Cliffs	764'
TD:	764'

Formation Name: **Fruitland Coal**

06-30-2006 MIRU Jet West, Run GR-CCL, Create Merge Log. PBTD 736'

07-01-2006 MIRU Silver Star. NU 3000# BOP. Test and Chart Casing to 1500 psi for 30 mins.

RU Blue Jet. Perforate Fruitland Coal 536' to 554' (18') with 88 holes in 2 - 10' guns 4 SPF

BD Perfs w/ 40 bbls Fresh Water, No Break, 3.5 BPM @ 100 psi. ISIP zero.

GIH w/ 21 Joints 2-3/8" 4.7# J-55 Tubing. Land EOT @ 672' KB. Swab back load. RDMO.

10/18/2006 - Phoenix Take DH Temp & Pressure @ 536' - Temp 67 F, BHP = 128.34 psig

11/17/2006 - Silver Star - MIRU, NU BOP. COOH laying down 2-3/8" Tbg. GIH and land 2-7/8" 6.5# J-55

Tubing @ 672' KB, same 21 Joints. ND BOP, NU WH.

11/18/2006 - Run DH pump, 4 1.5" Sinker Bars, 20 - 7/8" Rods, 8' pony and 2' pony, Polish Rod w/ liner.

Space out and hang well on.

Specialty Logs, Misc

Mud Log 139' to 764', Took Coal Samples for Adsorption Work

Open Hole Logs (Jet West)

GR-CDL-EL (6/22/06) - Bridged at 558'

Cased Hole Logs (Jet West)

GR-CL-CNL (6/30/06) - Created Merge Log

Thomas E. Mullins  
June 17, 2020