State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary

Todd E. Leahy, JD, PhDDeputy 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: 12/17/2019

Well information:

30-045-34452 BECK 29 12 10 #108

SYNERGY OPERATING LLC

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:
• Ensure the Fruitland is covered 1166'-1266'. OCD Fruitland pick @ 1216'.
• Extend surface plug to 550'-0'. OCD Kirtland pick @ 500'.
NMOCD Approved by Signature

Form 3160-5 (June 2015)

KP

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT 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.

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

5. Lease Serial No. NMNM014375

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ı	6.	If Indian, Allottee or Tribe Name

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SUBMIT IN	Oil Well ☐ Gas Well ☑ Other: COAL BED METHANE Name of Operator Contact: GI FN PAPP 9. API Well No.				nd/or No.		
Type of Well ☐ Oil Well ☐ Gas Well ☑ Other: COAL BED METHANE						าย	
2. Name of Operator Contact: GLEN PAPP SYNERGY OPERATING, LLC E-Mail: gpapp@synergyoperating.com				9. API Well No. 30-045-34452-00-S1			
3a. Address			(include area code)		10. Field and Pool or E		rea
FARMINGTON, NM 87499		Ph: 505-599 Fx: 505-599	9-4908 Ext: 1582 -4900	2	BASIN FRUITLA	AND COAL	
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description				11. County or Parish, S	State	
Sec 10 T29N R12W SESW 11 36.737107 N Lat, 108.090304					SAN JUAN COL	JNTY, NM	
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICAT	TE NATURE O	F NOTICE,	REPORT, OR OTH	ER DATA	
TYPE OF SUBMISSION TYPE OF ACTIO							
Mating of Intent	☐ Acidize	☐ Deep	en	☐ Product	ion (Start/Resume)	☐ Water S	Shut-Off
☑ Notice of Intent	☐ Alter Casing	☐ Hydi	aulic Fracturing	☐ Reclama	ation	☐ Well In	tegrity
☐ Subsequent Report	□ Casing Repair	☐ New	Construction	☐ Recomp	lete	☐ Other	
☐ Final Abandonment Notice	☐ Change Plans	☑ Plug	and Abandon	□ Tempor	rarily Abandon		
	☐ Convert to Injection	☐ Plug	Back	☐ Water D	Pisposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Attached that the site is ready for fi Synergy Operating LLC plans Attached are the follow docum 1) Wellbore plugging plan 2) Reclamation plan	ally or recomplete horizontally, it will be performed or provide operations. If the operation reandonment Notices must be fil inal inspection. to plug and abandon the nents:	give subsurface lethe Bond No. on sults in a multiple ded only after all r	ocations and measu file with BLM/BIA completion or reco	red and true ve Required sub impletion in a r ing reclamation	rtical depths of all pertino esequent reports must be new interval, a Form 3160	ent markers ar filed within 30 3-4 must be fil	nd zones. O days led once
	Electronic Submission # For SYNERGY ed to AFMSS for processing	OPERATING, L	LĆ, sent to the I A WETHINGTON	Farmington on 12/19/201	9 (20AMW0114SE)		
Name(Printed/Typed) GLEN PA	<u> </u>		Title OPERA	I IONS MAI	NAGER / PARTNER		
Signature (Electronic S	Submission)		Date 12/17/20	019			
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE		
Approved By .IOF KILLINS			TitleFNGINFFI	₹		Date	03/12/2020

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.

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

Wellbore Plugging Plan

Synergy Operating, LLC

Beck 29-12-10 #108
Plugging & Final Abandonment

Prepared by:

Glen O. Papp, P.E. Partner / Operations Manager

December 2019

Submitted Electronically

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

Well Information:

Well Name & #:	Beck 29-12-10 #108
API#:	30-045-34452
Legal Location:	1165' FSL & 1510' FWL, Section 10-N, T-29-N, R-12-W, San Juan Co., NM
Latitude/Longitude:	36.73711 / -108.09031
Federal Lease #:	NM-014375
USGS Topo Map:	Horn Canyon, NM 1965 (PR 1979), USGS Quad Code: 36108-F1
Drilling Spud date:	February 2, 2008
TD / PBTD:	1865' / 1832'
Surface Hole Size:	12-1/4"
Surface Casing:	8-5/8" 24# J-55 @ 208' Cmt'd w/ 142-sxs Type V cmt – circ to surface
Production Hole Size:	7-7/8"
Production Casing:	5-1/2" 15.5# J-55 @ 1853' Cmt'd w/ 280-sxs Type V cmt – circ to surface
Perforations:	Fruuitland Coal: 1655-57', 1622-42' w/ 4-SPF (88-Holes)
Tubing in Hole:	53-Jts 2-3/8" 4.7# J-55 EUE w/ SN & MA, EOT @ 1736'
Formation Tops (KB):	Ojo Alamo @ 329', Kirtland @ 410', Fruitland @ 1216', PC @ 1660'

Project Summary:

Synergy Operating, LLC ("Synergy") is the operator of the Beck 29-12-10 #108 well. A Fruitland Coal gas well. The well has not produced economic quantities of gas for some time. 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. The NIA will be submitted on the <u>Sundry Notices</u> and Reports on Wells, Form 3160-5.

Proposed wellbore plugging procedure:

- 1. Notify BLM-FFO & NM OCD @ least 24-hrs prior to MIRU. MI well servicing rig. Check and record; Ptbg, Pcsg, Pbh. Load 2-3/8" tbg with water & PT to 1000#.
- 2. Unseat rod pump and TOH, laying down polished rod, polished rod liner, $\frac{3}{4}$ " rod subs, $63 \frac{3}{4}$ " rods, $4 1 \frac{1}{4}$ " sinker-bars and 2" x $1 \frac{1}{2}$ " x 12' RHAC pump.
- 3. ND WH & NU 7-1/16" 3M x 8-5/8" API Modified flange. NU BOPE & Function Test.
- 4. TOOH tallying 53-Jts 2-3/8" 4.7# J-55 EUE tbg, LD 2-3/8" Mud Anchor & SN.
- 5. TIH w/ 2-3/8" 4.7# J-55 EUE tbg OE'd to 1710'.
- 6. **Plug #1**: Mix and pump 21-sxs of Class 'G' cement and spot balanced plug F/1710' –T/1572'. PUH and WOC. TIH & tag TOC, top off if necessary.
- 7. PUH to 1266', laying down 2-3/8" tbg. PT 5-1/2" 15.5# csg to 800#.

- 8. **Plug #2**: Mix and pump 18-sxs of Class 'G' cement and spot balanced plug F/1266' –T/1166'.
- 9. PUH to 450', laying down 2-3/8" tbg
- 10. Pressure Test Bradenhead 8-5/8" x 5-1/2" annulus to 300#.
 - (a) If PT **Holds**, Mix and pump **Plug #3**, 53-sxs Class 'G' cement inside 5-1/2" casing F/450' T/Surface.
 - (b) If PT Fails, TOOH w/ 2-3/8" tbg, RIH & perforate 5-1/2" as directed, Establish circulation & Mix and pump Plug #3 (Volume TBD) inside and outside 5-1/2" casing from squeeze holes to surface.
- 11. TOOH and LD 2-3/8" tbg.
- 12. ND BOPE. Cut-off wellhead & rig anchors. Top off cement if necessary and install P&A marker.
- 13. RD well service rig.
- 14. Submit subsequent report plug and abandon (SRA) using the <u>Sundry Notices and</u> Reports on Wells Form 3160-5.
- 15. See Reclamation Plan for surface restoration.

Wellbore diagrams:

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

Beck 29-12-10 #108

Current

Basin FtC

1165' FSL & 1510' FWL, Section 10, T29N, R12W San Juan County, NM, API #30-045-34452

Today's Date: 11/15/19 Spud: 2/20/08 Completed: 5/20/08 Elevation: 5603' GL

12-1/4" hole

8-5/8" 24# K-55 Casing set @ 208' Cement with 142 sxs, circulated to surface.

Ojo Alamo @ 329'

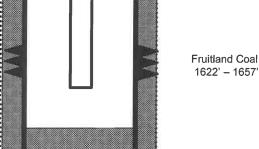
Kirtland @ 410'

2-3/8" @ 1639', SN @ 1735' w/rods and pump

Fruitland @ 1216'

Pictured Cliffs @ 1660'

7-7/8" hole



TD 1865' **PBTD 1832**' Fruitland Coal Perforations:

5.5",15.5#, J-55 Casing set @ 1853' Cement with 280 sxs, circulated

Beck 29-12-10 #108

Proposed P&A

Basin FtC

1165' FSL & 1510' FWL, Section 10, T29N, R12W San Juan County, NM, API #30-045-34452

Spud: 2/20/08 Completed: 5/20/08 Elevation: 5603' GL

Today's Date: 11/15/19

12-1/4" hole

Ojo Alamo @ 329'

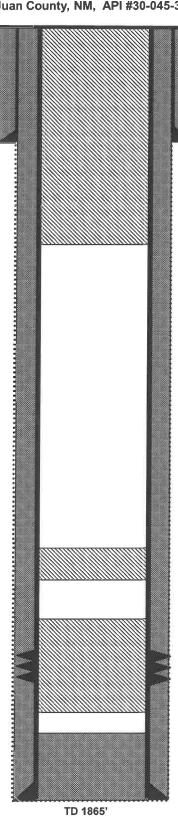
Kirtland @ 410'

***BLM picks Fruitland @ 1124'

Fruitland @ 1216'

Pictured Cliffs @ 1660'

7-7/8" hole



PBTD 1832'

8-5/8" 24# K-55 Casing set @ 208' Cement with 142 sxs, circulated to surface.

> Plug #3: 450' - 0' Class G cement, 53 sxs

***plug 2 1074'- 1174'

Plug #2: 1266' - 1166' Class G cement, 18 sxs

Plug #1: 1710' - 1572' Class G cement, 21

SXS

Fruitland Coal Perforations: 1622' - 1657'

5.5",15.5#, J-55 Casing set @ 1853' Cement with 280 sxs, circulated

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: Beck 29-12-10 #108

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. BLM picks top of Fruitland at 1124' md. Modify plug 1 to cover 1074' 1174'md excluding required excess.

BLM FLUID MINERALS Geologic Report

Date Completed: 3/11/20

Well No.	Vell No. Beck 29-12-10 #108			1165′	FSL	&	1510′	FWL
Lease No.	NMNM01437:	Sec. 10	T29N		R12W			
Operator	Operator Synergy		County	San Juan S		State	New Mexico	
Total Depth 1865' PBTD 1832'		Formation	Fulcher	Fulcher Pictured Cliffs/Basin Fruitland Coal				
Elevation (GL)	Elevation (Kl	Elevation (KB) 5615' (est.)						

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/Fresh water sands
Nacimiento Fm			Surface	323'	Fresh water sands
Ojo Alamo Ss			323'	454'	Aquifer (fresh water)
Kirtland Shale			454'	1124′	
Fruitland Fm			1124′	1664′	Coal/Gas/Possible water
Pictured Cliffs Ss			1664′	1844′	Gas
Lewis Shale			1844′		
Chacra (upper)					Probable water or dry
La Ventana Tongue					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.

Reference Well:

1)Hilcorp Beck A No 1 1700' FSL, 1760' FEL Sec 10, T29N, 12W GL= 5609' Fm. Tops

Prepared by: Walter Gage