

Well Name: LINDRITH UNIT	Well Location: T24N / R3W / SEC 21 / SWNW / 36.298599 / -107.168223	County or Parish/State: RIO ARRIBA / NM
Well Number: 29	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078913	Unit or CA Name: LINDRITH UNIT - PC	Unit or CA Number: NMNM78399A
US Well Number: 300390538800S1	Well Status: Producing Gas Well	Operator: MORNINGSTAR PARTNERS LP

Notice of Intent

Sundry ID: 2667594

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 04/19/2022

Time Sundry Submitted: 09:55

Date proposed operation will begin: 05/02/2022

Procedure Description: MorningStar requests approval to plug and abandon the Lindrith Unit #29. Attached are the Proposed Procedure, WBDs, and Reclamation Plan.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

PA_Procedure__WBDs__Reclamation_Plan_Lindrith_Unit_29_20220419095333.pdf

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Well Status: Producing Gas Well

Operator: MORNINGSTAR PARTNERS LP

Conditions of Approval

Additional Reviews

General_Requirement_PxA_20220420154957.pdf

2667594_NOIA_29_3003905388_KR_04202022_20220420154940.pdf

24N03W21EKpc_Lindrith_Unit_29_20220420104704.pdf

Operator Certification

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: CONNIE BLAYLOCK

Signed on: APR 19, 2022 09:54 AM

Name: MORNINGSTAR PARTNERS LP

Title: Regulatory Technician

Street Address: 400 W 7th St.

City: Forth Worth

State: TX

Phone: (817) 334-7882

Email address: CBLAYLOCK@MSPARTNERS.COM

Field Representative

Representative Name: Amy Byars

Street Address:

City:

State:

Zip:

Phone:

Email address: abyars@mspartners.com

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 04/20/2022

Signature: Kenneth Rennick

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402**

AFMSS 2 Sundry ID 2667594

Attachment to notice of Intention to Abandon

Well: Lindrith Unit 29

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 at (505) 564-7750.
3. The following modifications to your plugging program are to be made:
 - a. Bring the top of Plug #1 up to 2901' to cover BLM pick for the Fruitland formation top (2951').
 - b. After running the CBL, send data to the BLM (krennick@blm.gov). Plugs may be modified based on the results.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 4/20/2022

**BLM FLUID MINERALS
P&A Geologic Report**

Date Completed: 04/20/2022

Well No. Lindrith Unit #29 (API# 30-039-05388)	Location	1650	FNL	&	800	FWL
Lease No. NMSF-078913	Sec. 21	T24N			R03W	
Operator MorningStar Operating, LLC	County	Rio Arriba		State	New Mexico	
Total Depth 3187'	PBTD 3151'	Formation Pictured Cliffs				
Elevation (GL) 7004'		Elevation (KB) 7014'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm			Surface	1553	Surface/freshwater sands
Nacimiento Fm			1553	2633	Possible freshwater sands
Ojo Alamo Ss			2633	2799	Aquifer (possible freshwater)
Kirtland Shale			2799	2951	
Fruitland Fm			2951	3094	Coal/Gas/Possible water
Pictured Cliffs Ss			3094	PBTD	Gas
Lewis Shale					
Chacra					
Cliff House Ss					
Menefee Fm					
Point Lookout Ss					
Mancos Shale					
Gallup					
Greenhorn					
Graneros Shale					
Dakota Ss					

Remarks:

P & A

- BLM picks for the Fruitland and Kirtland formation tops vary from Operator.
- Bring the top of Plug #1 up to 2901' to cover BLM pick for the Fruitland formation top (2951').
- The plugs proposed in the P&A procedure, with changes recommended above, will adequately protect any freshwater sands in this well bore.
- Pictured Cliffs perms 3104' – 3146'.

Reference Well:

1) **Formation Tops**
Same

Prepared by: Chris Wenman

**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 minimum general 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 H₂S.

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.

PROPOSED P&A PROCEDURE

Lindrith 29

1. MIRU.
2. POOH w/ tubing.
3. Run a casing scraper to 3,085'
4. Set CICR @ 3,060'
5. Spot 25 sx Class B Cement on top of plug. (est'd TOC @ 2,851'). WOC, test casing integrity.
6. RU and run CBL.
7. Circulate hole with mud laden fluid.
8. Spot cement plug from 2,849' – 2,533' with 37 sx Class B cement.
10. Perforate at 1603', set CICR at 1,553', spot inside/outside balanced cement plug from 1,603' – 1,503' with a total of 55 sx Class B cement (which includes 100% excess).
11. Perforate at 192', circulate balanced cement plug from 192' to surface with 60 sx Class B cement. Ensure cement at surface on all strings of casing, top off as needed.
12. Cut off wellhead below surface casing flange. Install P&A marker.

**MorningStar Operating,
LLC**

Prepared by: J. Marschall
Updated by: JRyza
Date: 04/19/2022

KB = 10'
GL = 7,004'
API# 30-039-05388

Spud Date: 04/04/1959
Date Completed: 04/29/1959

**Lindrith Unit 29
Rio Arriba County, NM**

Current WBD

All depths include KB
TD – 3,187'; PBTD – 3,151'

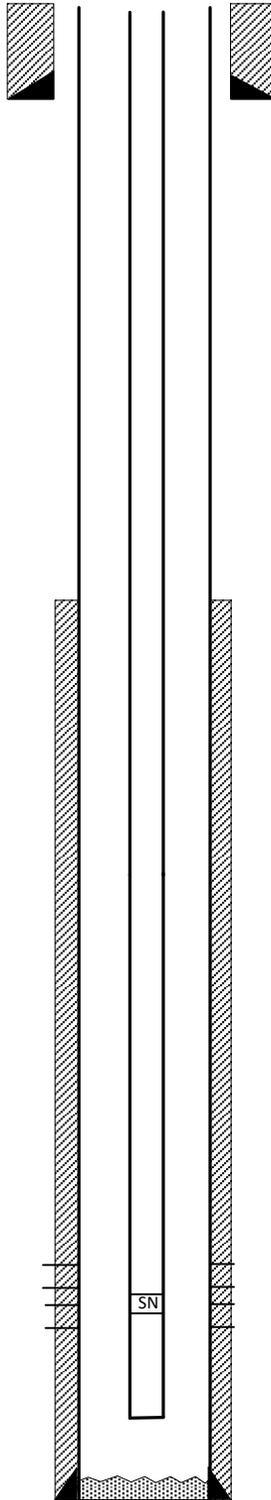
Surface Csg: 4 jts 8-5/8" 32# J-55
Setting Depth: 142'

Cement
60 sx Cement
Cmt circulated

Production Csg: 77 jts 5-1/2" 15.5# J-55
Setting Depth: 3,181'

Cement:
72 sx cement
TOC unknown

Nacimiento – 1,553'
Ojo Alamo – 2,633'
Kirtland – 2,799'
Fruitland – 2,951'
Picture Cliffs – 3,094'



Picture Cliffs Perfs (1959):
3,104' – 3,114' (4spf)
3,122' – 3,130' (4spf)
3,137' – 3,146' (4spf)

1-1/4" Tubing to 3,134' – 97 jts

PBTD: 3,151'

MorningStar Operating,
LLC

Proposed P&A WBD

Prepared by: J. Marschall
Updated by: JRyza
Date: 04/19/2022

KB = 10'
GL = 7,004'
API# 30-039-05388

Spud Date: 04/04/1959
Date Completed: 04/29/1959

Lindrith Unit 29
Rio Arriba County, NM

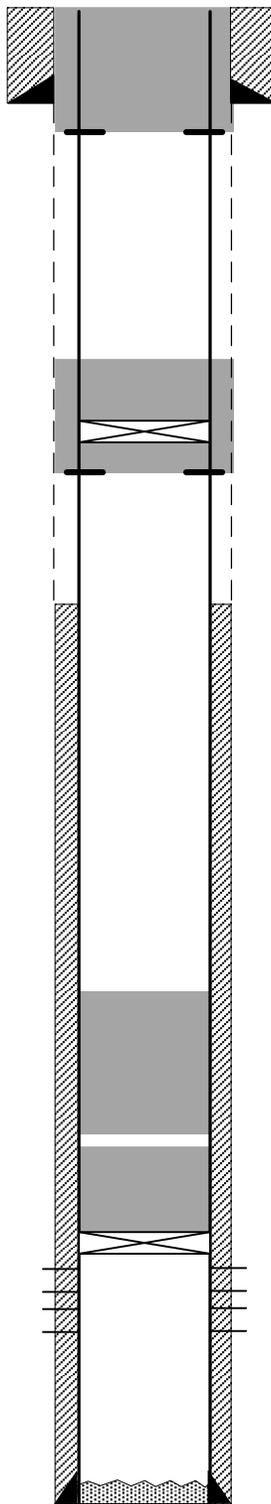
All depths include KB
TD - 3,187'; PBTD - 3,151'

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Setting Depth: 142'

Cement
60 sx Cement
Cmt circulated

Production Csg: 77 jts 5-1/2" 15.5# J-55
Setting Depth: 3,181'

Cement:
72 sx cement
TOC unknown



PLUG 4
Perf 5-1/2" casing at 192'
60 sx cement 192' - surface

Nacimiento - 1,553'
Ojo Alamo - 2,633'
Kirtland - 2,799'
Fruitland - 2,951'
Picture Cliffs - 3,094'

PLUG 3 (inside/outside)
Perf 5 1/2" casing at 1,603', set CICR @ 1,553'
Outside 31 sx cmt, 1,503' - 1,603' (100% excess)
Inside 24 sx cmt, 1,503' - 1,603' (100% excess)

PLUG 2 (Kirtland, Ojo)
37 sx cement 2,533' - 2,849'

PLUG 1
25 sx cement 2,851' - 3,060'
CICR set @ 3,060'

Picture Cliffs Perfs (1959):

- 3,104' - 3,114' (4spf)
- 3,122' - 3,130' (4spf)
- 3,137' - 3,146' (4spf)

PBTD: 3,151'

P&A RECLAMATION PLAN**Lindrith Unit #29**

API: 30-039-05388

Unit: E Sec: 21 T24N R3W

36.29863°, -107.1676°

General Notes:

- MorningStar Operating LLC will comply with the requirements in accordance with the approved Sundry Notice associated with this submittal.
- Surface equipment and trash, if any, will be removed.
- Underground production piping on the well site will be removed or abandoned-in-place.
- The P&A marker will be permanent and comply with NMOCD regulations.

Well Site Reclamation:

- Per discussions with surface owner's representatives, location will be left in current condition. Any areas disturbed due to the P&A process will be seeded.

Access Road Reclamation:

- Location is directly adjacent to another operator's well location. No access road reclamation is necessary.

Revegetation:

The planned initial seed mixture and application rates for the Sagebrush/Grass Community identified during the site visit will be as follows. The seed application rates may be adjusted according to various methods of application.

Species	Select		Lbs/acre (PLS)*
Fourwing Saltbush	X	Pick two out of three	2.0
Antelope Bitterbrush			2.0
Winterfat	X		2.0
Indian Ricegrass	X	Pick three out of five	4.0
Blue Grama	X		2.0
Galleta			3.0
Sand Dropseed			0.5
Western Wheatgrass	X		4.0
Bottle Brush Squaretail	X	Pick one out of two	3.0
Siberian Wheatgrass			3.0
Small Burnet		Pick one out of three	2.0
Rocky Mountain Bee Plant			0.25
Blue Flax	X		0.25

TOTAL			17.25
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* Minimum if drill seeded. Double this rate if broadcast or hydroseeded.

- Seeding will be broadcast so the rates will be doubled and a rake or harrow will be used to incorporate the seed into the soil.
- Seed mixtures will be certified weed-free and the seeding records (bag labels) or other official documentation will be available to the BLM prior to seeding, upon request.
- Seeding will occur as soon as reasonably possible following completion of earthwork activities and timed for successful germination.
- The need for soil amendments is not expected or proposed.

Monitoring:

- MorningStar Operating LLC will submit a Sundry Notice informing the BLM the seeding is completed.
- After completion of the reclamation, MorningStar Operating LLC will meet with the surface owner or representative to acquire a letter of concurrence stating that they are satisfied with the reclamation. This information will be submitted with a Sundry Notice (FAN) requesting approval of the reclaimed location.

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 100530

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 100530
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	4/25/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	4/25/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	4/25/2022