

|                                       |  |  |
|---------------------------------------|--|--|
| <b>Well Name:</b> LINDRITH UNIT       | <b>Well Location:</b> T24N / R2W / SEC 7 / SWSW / 36.32008 / -107.096395 | <b>County or Parish/State:</b> RIO ARRIBA / NM |
| <b>Well Number:</b> 109               | <b>Type of Well:</b> CONVENTIONAL GAS WELL                               | <b>Allottee or Tribe Name:</b>                 |
| <b>Lease Number:</b> NMSF078908       | <b>Unit or CA Name:</b> LINDRITH UNIT - PC                               | <b>Unit or CA Number:</b> NMNM78399A           |
| <b>US Well Number:</b> 300392302500S1 | <b>Well Status:</b> Producing Gas Well                                   | <b>Operator:</b> MORNINGSTAR PARTNERS LP       |

**Notice of Intent**

**Sundry ID:** 2652507

**Type of Submission:** Notice of Intent

**Type of Action:** Plug and Abandonment

**Date Sundry Submitted:** 01/13/2022

**Time Sundry Submitted:** 12:56

**Date proposed operation will begin:** 04/15/2022

**Procedure Description:** MorningStar requests approval to plug and abandon the Lindrith Unit #109. Attached are the Proposed Procedure, Proposed WBD, and the Reclamation Plan.

**Surface Disturbance**

**Is any additional surface disturbance proposed?:** No

**NOI Attachments**

**Procedure Description**

Reclamation\_Plan\_\_Lindrith\_Unit\_109\_20220301130053.pdf

Lindrith\_109\_WBD\_Proposed\_P\_A\_20220113125439.pdf

Lindrith\_109\_P\_A\_Proposed\_Procedure\_20220113125404.pdf

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**County or Parish/State:** RIO ARRIBA / NM

**Well Number:** 109

**Type of Well:** CONVENTIONAL GAS WELL

**Allottee or Tribe Name:**

**Lease Number:** NMSF078908

**Unit or CA Name:** LINDRITH UNIT - PC

**Unit or CA Number:** NMNM78399A

**US Well Number:** 300392302500S1

**Well Status:** Producing Gas Well

**Operator:** MORNINGSTAR PARTNERS LP

### Conditions of Approval

#### Specialist Review

2652507\_NOIA\_109\_3003923025\_KR\_03012022\_20220301132049.pdf

General\_Requirement\_PxA\_20220301132035.pdf

#### Additional Reviews

24N02W07MKpc\_Lindrith\_Unit\_109\_20220114164047.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:** MAR 01, 2022 01:01 PM

**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:** 03/01/2022

**Signature:** Kenneth Rennick

## PROPOSED P&A PROCEDURE

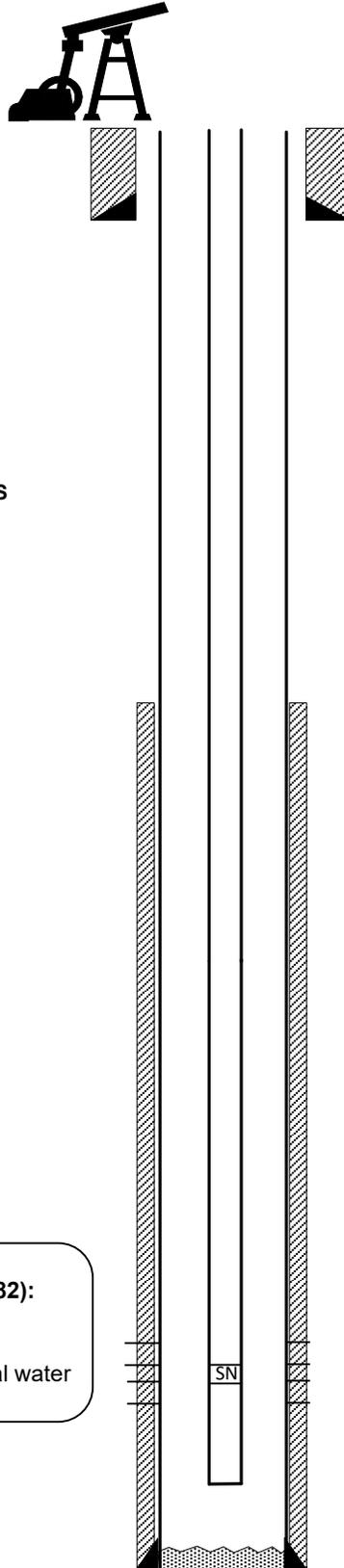
### Lindrith 109

1. MIRU.
2. POOH w/ tubing.
3. Run a casing scraper to 3,255'
4. Set CICR @ 3,200'
5. Spot 17 sx Class B Cement on top of plug. (est'd TOC @ 3,050'). WOC, test casing integrity.
6. RU and run CBL.
7. Circulate hole with mud laden fluid.
8. Spot cement plug from 3,050' – 2,707' with 37 sx Class B cement.
9. Perforate at 1,414', spot balanced cement plug from 1,414' – 1,314' plus 100% excess with a total of 74 sx Class B cement.
10. Perforate at 188', spot balanced cement plug from 188' to surface with 85 sx Class B cement. Ensure cement at surface on all strings of casing, top off as needed.
11. Cut off wellhead below surface casing flange. Install P&A marker.

**MorningStar  
Operating, LLC**

**Lindrith Unit 109  
Rio Arriba County, NM**

**Current WBD**



Prepared by: J. Marschall  
Date: 11/09/2021

KB = 12'  
GL = 7,112'  
API# 30-039-23025

Spud Date: 06/27/1982  
Date Completed: 08/08/1982

Nacimiento – 1,364'  
Ojo Alamo – 2,757'  
Kirtland – 2,928'  
Fruitland – 2,959'  
Picture Cliffs – 3,230'  
CBL – Not yet

All depths include KB  
TD – 3,409'; PBTD – 3,368'

Surface Csg: 3 jts 8 5/8" 24#  
Setting Depth: 138'

Cement  
90 sx Cement  
Cmt circulated

Production Csg: 88 jts 4-1/2" 10.5# KS  
Setting Depth: 3,405'

Cement:  
140 sx cement  
TOC unknown

**Picture Cliffs Perfs (1982):**

3,238' – 3,336'  
52,000# sand, 68,000 gal water

1 1/4" tubing set at 3,313' - 3/21/17

PBTD: 3,368'

# MorningStar Operating, LLC

Lindrith Unit 109  
Rio Arriba County, NM

## Proposed P&A

|                            |
|----------------------------|
| Prepared by: J. Marschall  |
| Date: 11/09/2021           |
| KB = 12'                   |
| GL = 7,112'                |
| API# 30-039-23025          |
| Spud Date: 06/27/1982      |
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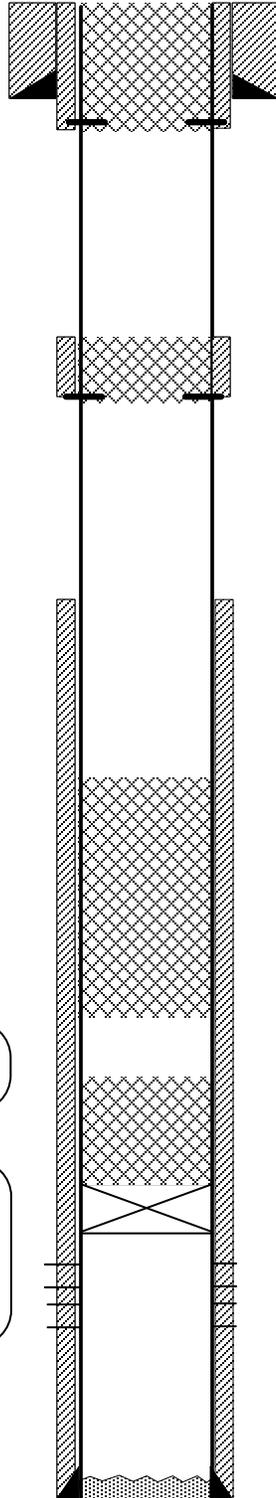
All depths include KB  
TD - 3,409'; PBTD - 3,368'

Surface Csg: 3 jts 8 5/8" 24#  
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Cmt circulated

Production Csg: 88 jts 4-1/2" 10.5# KS  
Setting Depth: 3,405'

Cement:  
140 sx cement  
TOC unknown



**PLUG 4 (inside/outside)**  
Perf 4 1/2" casing at 188'  
85 sx cement 188' - surface

Nacimiento - 1,364'  
 Ojo Alamo - 2,757'  
 Kirtland - 2,928'  
 Fruitland - 2,959'  
 Picture Cliffs - 3,230'  
 CBL - Not yet

**PLUG 3 (inside/outside)**  
Perf 4 1/2" casing at 1,414'  
Outside 53 sx cement, 1,314' - 1,414' plus 100% excess  
Inside 21 sx cement, 1,314' - 1,414' plus 100% excess

**PLUG 2 (combine Fruitland and Ojo Alamo)**  
37 sx cement 2,707' - 3,050'

**PLUG 1**  
17 sx cement 3,050' - 3,200'

CICR set @ 3,200'

1 1/4" tubing set at 3,313' - 3/21/17

**Picture Cliffs Perfs (1982):**  
 3,238' - 3,336'  
 52,000# sand, 68,000 gal water

PBTD: 3,368'

**P&A RECLAMATION PLAN**

**Lindrith Unit #109**

API: 30-039-23025

Unit: M Sec: 7 T24N R2W

795 FSL & 860 FWL

**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.
- The P&A marker will be permanent and comply with NMOCD regulations.

**Well Site Reclamation:**

- Per the landowner request, the well pad will be left as is and no reclamation or seeding will be conducted.

**Access Road Reclamation:**

- The associated access road will be left in place for landowner use.

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

AFMSS 2 Sundry ID 2652507

Attachment to notice of Intention to Abandon

Well: Lindrith Unit 109

**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.

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 3/1/2022

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

**Date Completed:** 01/14/2022

|   |            |                           |     |       |            |     |
|---|------------|---------------------------|-----|-------|------------|-----|
| Well No. Lindrith Unit #109 (API# 30-039-23025) | Location   | 795                       | FSL | &     | 860        | FWL |
| Lease No. NMSF-078908                           | Sec. 07    | T24N                      |     |       | R02W       |     |
| Operator MorningStar Operating, LLC             | County     | Rio Arriba                |     | State | New Mexico |     |
| Total Depth 3409'                               | PBTD 3368' | Formation Pictured Cliffs |     |       |            |     |
| Elevation (GL) 7112'                            |            | Elevation (KB) 7124'      |     |       |            |     |

| Geologic Formations | Est. Top | Est. Bottom | Log Top | Log Bottom | Remarks                       |
|---------------------|----------|-------------|---------|------------|-------------------------------|
| San Jose Fm         |          |             | Surface | 1364       | Surface/freshwater sands      |
| Nacimiento Fm       |          |             | 1364    | 2757       | Possible freshwater sands     |
| Ojo Alamo Ss        |          |             | 2757    | 2928       | Aquifer (possible freshwater) |
| Kirtland Shale      |          |             | 2928    | 2959       |                               |
| Fruitland Fm        |          |             | 2959    | 3230       | Coal/Gas/Possible water       |
| Pictured Cliffs Ss  |          |             | 3230    | PBTD       | Gas                           |
| Lewis Shale         |          |             |         |            |                               |
| Chacra              |          |             |         |            | Gas                           |
| 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                     |
| Greenhorn           |          |             |         |            |                               |
| Graneros Shale      |          |             |         |            |                               |
| Dakota Ss           |          |             |         |            | O&G/Water                     |

Remarks:  
P & A

- The plugs proposed in the P&A procedure will adequately protect any freshwater sands in this well bore.
- Pictured Cliffs perms 3238' – 3336'.

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 H<sub>2</sub>S.

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.

(October 2012 Revision)

**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 85878

**CONDITIONS**

|  |   |
|--|---|
| Operator:<br>MorningStar Operating LLC<br>400 W 7th St<br>Fort Worth, TX 76102 | OGRID:<br>330132                                    |
|  | Action Number:<br>85878                             |
|  | Action Type:<br>[C-103] NOI Plug & Abandon (C-103F) |

**CONDITIONS**

| Created By | Condition  | Condition Date |
|------------|--|----------------|
| kpickford  | CBL required   | 3/7/2022       |
| kpickford  | Notify NMOCD 24 Hours Prior to beginning operations    | 3/7/2022       |
| kpickford  | Adhere to BLM approved COAs and plugs. See GEO report. | 3/7/2022       |