

| | | |
|----------------------------|--|---|
| Well Name: SDE 19 FEDERAL | Well Location: T23S / R32E / SEC 19 / NESW / | County or Parish/State: LEA / NM |
| Well Number: 04 | Type of Well: OIL WELL | Allottee or Tribe Name: |
| Lease Number: NMNM18848 | Unit or CA Name: | Unit or CA Number: |
| US Well Number: 3002532909 | Well Status: Inactive | Operator: HARVARD PETROLEUM COMPANY LLC |

Notice of Intent

Sundry ID: 2715553

| | |
|--|--------------------------------------|
| Type of Submission: Notice of Intent | Type of Action: Plug and Abandonment |
| Date Sundry Submitted: 02/14/2023 | Time Sundry Submitted: 09:07 |
| Date proposed operation will begin: 02/14/2023 | |

Procedure Description: Harvard is planning on performing P&A procedure. Please see attachment.

Surface Disturbance

Is any additional surface disturbance proposed?: No

Approval Subject to
General Requirements and
Special Stipulations
Attached

NOI Attachments

Procedure Description

BLM_Sundry_PA_SDE_19_Fed_4_20230214090620.pdf

Received by OCD: 4/21/2023 4:04:33 PM

Page 2 of 35

| | | |
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| Well Name: SDE 19 FEDERAL | Well Location: T23S / R32E / SEC 19 / NESW / | County or Parish/State: LEA / NM |
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| Lease Number: NMNM18848 | Unit or CA Name: | Unit or CA Number: |
| US Well Number: 3002532909 | Well Status: Inactive | Operator: HARVARD PETROLEUM COMPANY LLC |

Operator

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

| | |
|--|----------------------------------|
| Operator Electronic Signature: RONI KIDD | Signed on: FEB 14, 2023 09:06 AM |
| Name: HARVARD PETROLEUM COMPANY LLC | |
| Title: Business Manager | |
| Street Address: PO BOX 936 | |
| City: ROSWELL | State: NM |
| Phone: (575) 390-2069 | |
| Email address: RKIDD@HPCNM.COM | |

Field

| | | |
|----------------------|--------|------|
| Representative Name: | | |
| Street Address: | | |
| City: | State: | Zip: |
| Phone: | | |
| Email address: | | |

PLUG AND ABANDONMENT CONDITIONS OF APPROVAL

| | |
|-----------------------------|---|
| OPERATOR'S NAME: | Harvard Petroleum Company LLC |
| LEASE NO.: | NMNM18848 |
| WELL NAME & NO.: | SDE 19 Federal 04 |
| US Well Number: | 3002532909 |
| LOCATION: | Section 19, T.23 S., R.32 E., NMPM |
| COUNTY: | Lea County, New Mexico |
| Sundry ID: | 2715553 |
| Karst: | <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/> Critical |
| Potash: | <input type="checkbox"/> Secretary <input type="checkbox"/> R111P |
| Special Area: | <input checked="" type="checkbox"/> Prairie Chicken <input type="checkbox"/> Capitan Reef |

Harvard Petroleum proposes to plug the well as follows:

MIRU Pulling Unit. POH w/ rods and tubing

Tag PBTD and circulate. Spot cement from 8583' to 8397'. WOC and Tag.

Set CIBP @ 8220' and cap with 35' bailed on top of CIBP OR 25 sx class H spotted on top of CIBP - Perts

Load hole with plugging mud and test casing to 500 psi.

Spot cement from 7912' to 6949'. WOC and Tag. (Squeezed perforations) 96 sxs Class C.

Spot cement from 5390' to 5226'. WOC and Tag. (Squeeze perforations) 25 sxs Class C.

Pump 45 sx class C @ 4708'; 4708' to 4253', WOC and tag - Top Delaware and 8 5/8" casing shoe, Base of Salt

Perf and squeeze 172 sx class C @ 1254'; 1254' to 514' WOC and tag- Top of Salt, Shoe (In 74 sxs/Out 98 sxs)

Perf and squeeze app 200 sx class C @ 200' - Surface to 200' - Surface plug

After plugging operations the casing will be cut off 3' below ground level, a steel plate will be welded on top of the casings and a dry hole marker will be installed. The location will then be cleaned and re-mediated to BLM standards.

Attachments: Current Wellbore Diagram, Proposed Wellbore Diagram

Approval Subject to General Requirements and Special Stipulations Attached

- No more than 3000 feet between cement plugs in cased hole.
- Wait on Cement and Tag Top of Cement Requirement:

- 1. Shoe, Top of Salt, Base of Salt, DV tool, Perforate and Squeeze, Open Perforation.**
- 2. Formation plug is optional if a solid base is established and confirmed.**

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED OMB
No. 1004-0137 Expires:
December 31, 2024**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. NM18848

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator Harvard Petroleum Company

3a. Address PO Box 936, Roswell, NM 88202

3b. Phone No. (include area code)
(575) 623-1581

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

8. Well Name and No. SDE "19" Federal #4

9. API Well No. 30-025-32909

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2180 FSL & 2310 FWL Section 19, T23S, R32E10. Field and Pool or Exploratory Area
Triste Draw Delaware, West11. Country or Parish, State
Lea, New Mexico

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.)

Harvard Petroleum proposes to plug the well as follows:

MIRU Pulling Unit. POH w/ rods and tubing
Set CIBP @ 7020' and cap with 35' bailed on top of CIBP OR 25 sx class H spotted on top of CIBP - Perfs
Load hole with plugging mud and test casing to 500 psi.
Pump 35 sx class C @ 4687'; 4333-4687', WOC and tag - Top Delaware and 8 5/8" casing shoe
Perf and squeeze 35 sx class C @ 1302'; 1049-1302' WOC and tag - Top of Salt
Perf and squeeze 35 sx @ 630'; 495-630' WOC and tag - 11 3/4" casing shoe
Perf and squeeze app 200 sx class C @ 200' - Surface to 200' - Surface plug

After plugging operations the casing will be cut off 3' below ground level, a steel plate will be welded on top of the casings and a dry hole marker will be installed. The location will then be cleaned and re-mediated to BLM standards.

Attachments: Current Wellbore Diagram, Proposed Wellbore Diagram

Approval Subject to

General Requirements and

Special Stipulations

Attached

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Phelps White

Consultant

Title

Signature

Date

01/30/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

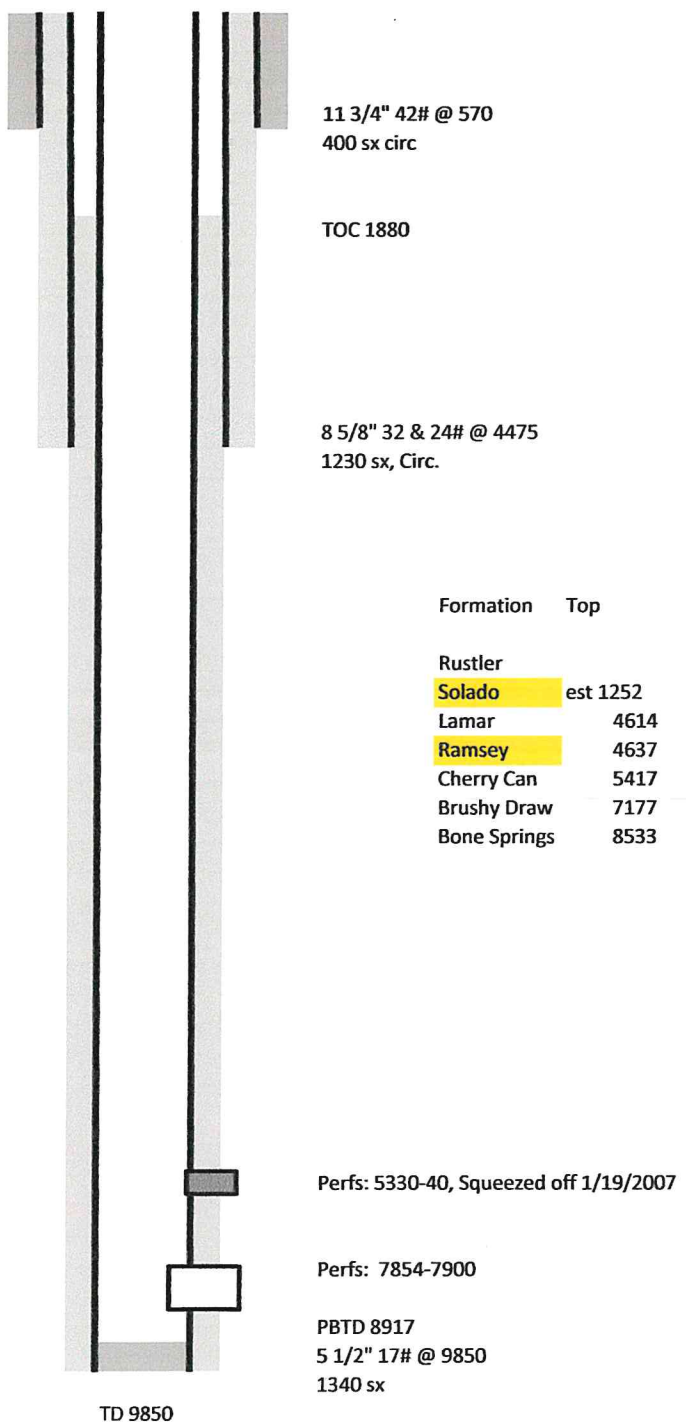
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Well Bore Diagram Worksheet

Operator: Harvard Petroleum Co. Date Spud: 1/11/2007
Well Name: SDE 19 Fed 4 Date Complete: 2/8/2007
API #: 30-025-32909
Location: 19, 23S, 32E

Current Wellbore



Well Bore Diagram Worksheet

Operator: Harvard Petroleum Co.
Well Name: SDE 19 Fed 4
API #: 30-025-32909
Location: 19, 23S, 32E

Date Spud: 1/11/2007
Date Complete: 2/8/2007

PROPOSED PLUGS

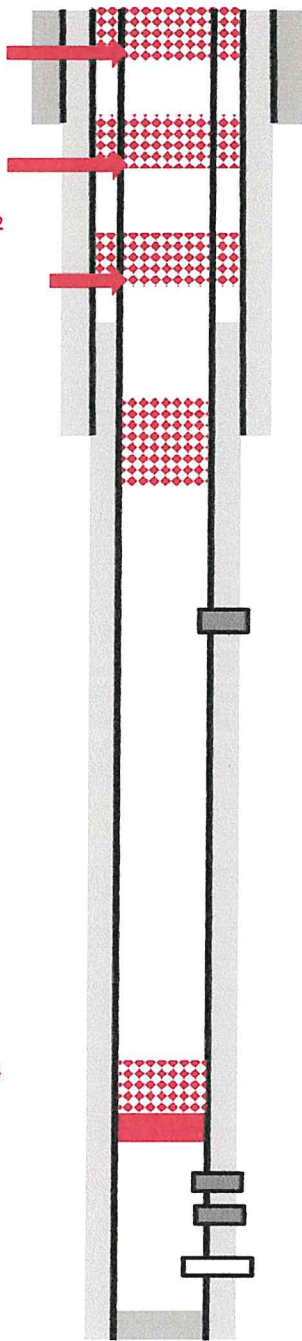
60 sx class C @ 200
Surface to 200'
Perf 200'

35 sx class C @ 630
495-630 TAG
Perf 630'

35 sx class C @ 1302
1049-1302 TAG
Perf 1302

35 sx class C @ 4687
4333 to 4687 TAG

25 sx class H @ 7804
6767-7020 TAG
CIBP @ 7020



11 3/4" 42# @ 570
400 sx circ

TOC 1880

8 5/8" 32 & 24# @ 4475
1230 sx, Circ.

Perfs: 5330-40, Squeezed off 1/19/2007

Formation est 1252

| | |
|--------------|----------|
| Rustler | |
| Solado | est 1252 |
| Lamar | 4614 |
| Ramsey | 4637 |
| Cherry Can | 5417 |
| Brushy Draw | 7177 |
| Bone Springs | 8533 |

Perfs: 7070-7507, Squeezed off
Perfs 7608-7862, Squeezed off

Perfs 8270-8358' Open
PBTD 8917
5 1/2" 17# @ 9850
1340 sx

TD 9850

Approval Subject to
General Requirements and
Special Stipulations
Attached

**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Permanent Abandonment of Federal Wells
Conditions of Approval (LPC Habitat)**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-689-5981.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Below Ground Level Cap (Lesser Prairie-Chicken Habitat): All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.** Upon the plugging and subsequent abandonment of wells that are located in lesser prairie-chicken habitat, the casings shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. A weep hole shall be left in the plate and/or casing.

NMOCD also requires the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a below ground cap was installed as required in the COA's from the BLM.

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.

Timing Limitation Stipulation/ Condition of Approval for Lesser Prairie-Chicken:

From March 1st through June 15th annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
620 E. Greene St.
Carlsbad, New Mexico 88220-6292
www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo “interim” reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo “final” reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any/all contaminants, scrap/trash, equipment, pipelines and powerlines **(Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure)**. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip (across the slope and seed as specified in the original APD COA. **This will apply to well pads, facilities, and access roads.** Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you

- have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.
5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos
Supervisory Petroleum Engineering Tech/Environmental Protection Specialist
575-234-5909 (Office), 575-361-2648 (Cell)

Arthur Arias
Environmental Protection Specialist
575-234-6230

Crisha Morgan
Environmental Protection Specialist
575-234-5987

Jose Martinez-Colon
Environmental Protection Specialist
575-234-5951

Mark Mattozzi
Environmental Protection Specialist
575-234-5713

Robert Duenas
Environmental Protection Specialist
575-234-2229

Trishia Bad Bear, Hobbs Field Station
Natural Resource Specialist
575-393-3612

| Sundry ID | | 2715553 | | | | | |
|-------------------------------------|---------|---------|--------|--|--------|--------------|---|
| Plug Type | Top | Bottom | Length | Tag | Sacks | Cement Class | Notes |
| Surface Plug | 0.00 | 100.00 | 100.00 | Tag/Verify | 25.00 | C | Perforate and squeeze from 100' to surface. Verify at surface. (In 10 sxs/Out 15 sxs) |
| Shoe Plug | 514.30 | 620.00 | 105.70 | Tag/Verify | | | |
| Top of Salt @ 1203 | 1140.97 | 1254.00 | 113.03 | Tag/Verify | 172.00 | C | Perforate and squeeze from 1254' to 514'. (In 74 sxs/Out 98 sxs) WOC and Tag. |
| Base of Salt @ 4347 | 4253.53 | 4397.00 | 143.47 | Tag/Verify | | | |
| Shoe Plug | 4380.25 | 4525.00 | 144.75 | Tag/Verify | | | |
| Delaware @ 4658 | 4561.42 | 4708.00 | 146.58 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 45.00 | C | Spot cement from 4708' to 4253'. WOC and Tag. |
| Top of squeezed perforations @ 5330 | 5226.70 | 5380.00 | 153.30 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |

| | | | | | | | |
|--|---------|---------|--------|--|-------|---|---|
| Bottom of squeezed perforations @ 5340 | 5236.60 | 5390.00 | 153.40 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 25.00 | C | Spot cement from 5390' to 5226'. WOC and Tag. |
| Top of squeezed perforations @ 7070 | 6949.30 | 7120.00 | 170.70 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| Bottom of squeezed perforations @ 7862 | 7733.38 | 7912.00 | 178.62 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 96.00 | C | Spot cement from 7912' to 6949'. WOC and Tag. |

| | | | | | | | |
|---------------------------------------|---------|---------|--------|--|-------|---|---|
| | | | | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| CIBP Plug | 8185.00 | 8220.00 | 35.00 | | 25.00 | H | Set CIBP at 8220'. Spot 25 sxs on top. Leak Test CIBP. |
| Perforations Plug (If No CIBP) | 8220.00 | 8408.00 | 188.00 | Tag/Verify | | | |
| | | | | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| Bonesprings @ 8533 | 8397.67 | 8583.00 | 185.33 | | 25.00 | H | Tag PBTD and circulate. Spot cement from 8583' to 8397'. WOC and Tag. |
| Shoe Plug | 9701.50 | 9900.00 | 198.50 | Tag/Verify | | | |

No more than 2000' is to be allowed between plugs in open hole, and no more than 3000' between plugs in cased hole.

Class H >7500'

Class C <7500'

Fluid used to mix the cement in R111P shall be saturated with the salts common to the section penetrated, and in suitable proportions, but not more than 3% calcium chloride by weight of cement will be considered the desired mixture whenever possible.

Medium, Secretary: Top of salt to surface If no salt take the deepest fresh water or Karst Depth

High, Critical: Bottom of Karst to surface or Deepest fresh water, whichever is greater

R111P: 50 Feet from Base of Salt to surface.

Class C: 1.32 ft³/sx

Class H: 1.06 ft³/sx

Onshore Order 2.III.G Drilling Abandonment Requirements: "All formations bearing usable-quality water, oil, gas, or geothermal resources, and/or a prospectively valuable deposit of minerals shall be protected.

| | | | |
|--------------------------|---------|-----------------------|---------|
| Cave Karst/Potash Cement | Low | | |
| Shoe @ | 570.00 | | |
| Shoe @ | 4475.00 | | |
| Shoe @ | 9850.00 | TOC @ | 1600.00 |
| Perforatons Top @ | 8270.00 | Perforations Bottom @ | 8358.00 |
| | | CIBP @ | 8220.00 |

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| Lease Number: NMNM18848 | Unit or CA Name: | Unit or CA Number: |
| US Well Number: 3002532909 | Well Status: Inactive | Operator: HARVARD PETROLEUM COMPANY LLC |

Notice of Intent

Sundry ID: 2715553

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| Type of Submission: Notice of Intent | Type of Action: Plug and Abandonment |
| Date Sundry Submitted: 02/14/2023 | Time Sundry Submitted: 09:07 |
| Date proposed operation will begin: 02/14/2023 | |

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Is any additional surface disturbance proposed?: No

Approval Subject to
General Requirements and
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NOI Attachments

Procedure Description

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Operator Electronic Signature: RONI KIDD

Signed on: FEB 14, 2023 09:06 AM

Name: HARVARD PETROLEUM COMPANY LLC

Title: Business Manager

Street Address: PO BOX 936

City: ROSWELL

State: NM

Phone: (575) 390-2069

Email address: RKIDD@HPCNM.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

PLUG AND ABANDONMENT CONDITIONS OF APPROVAL

| | |
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| OPERATOR'S NAME: | Harvard Petroleum Company LLC |
| LEASE NO.: | NMNM18848 |
| WELL NAME & NO.: | SDE 19 Federal 04 |
| US Well Number: | 3002532909 |
| LOCATION: | Section 19, T.23 S., R.32 E., NMPM |
| COUNTY: | Lea County, New Mexico |
| Sundry ID: | 2715553 |
| Karst: | <input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/> Critical |
| Potash: | <input type="checkbox"/> Secretary <input type="checkbox"/> R111P |
| Special Area: | <input checked="" type="checkbox"/> Prairie Chicken <input type="checkbox"/> Capitan Reef |

Harvard Petroleum proposes to plug the well as follows:

MIRU Pulling Unit. POH w/ rods and tubing

Tag PBTD and circulate. Spot cement from 8583' to 8397'. WOC and Tag.

Set CIBP @ 8220' and cap with 35' bailed on top of CIBP OR 25 sx class H spotted on top of CIBP - Perts

Load hole with plugging mud and test casing to 500 psi.

Spot cement from 7912' to 6949'. WOC and Tag. (Squeezed perforations) 96 sxs Class C.

Spot cement from 5390' to 5226'. WOC and Tag. (Squeeze perforations) 25 sxs Class C.

Pump 45 sx class C @ 4708'; 4708' to 4253', WOC and tag - Top Delaware and 8 5/8" casing shoe, Base of Salt

Perf and squeeze 172 sx class C @ 1254'; 1254' to 514' WOC and tag- Top of Salt, Shoe (In 74 sxs/Out 98 sxs)

Perf and squeeze app 200 sx class C @ 200' - Surface to 200' - Surface plug

After plugging operations the casing will be cut off 3' below ground level, a steel plate will be welded on top of the casings and a dry hole marker will be installed. The location will then be cleaned and re-mediated to BLM standards.

Attachments: Current Wellbore Diagram, Proposed Wellbore Diagram

Approval Subject to General Requirements and Special Stipulations Attached

- No more than 3000 feet between cement plugs in cased hole.
- Wait on Cement and Tag Top of Cement Requirement:

- 1. Shoe, Top of Salt, Base of Salt, DV tool, Perforate and Squeeze, Open Perforation.**
- 2. Formation plug is optional if a solid base is established and confirmed.**

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED OMB
No. 1004-0137 Expires:
December 31, 2024**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. NM18848

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator Harvard Petroleum Company

3a. Address PO Box 936, Roswell, NM 88202

3b. Phone No. (include area code)
(575) 623-1581

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

8. Well Name and No. SDE "19" Federal #4

9. API Well No. 30-025-32909

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2180 FSL & 2310 FWL Section 19, T23S, R32E10. Field and Pool or Exploratory Area
Triste Draw Delaware, West11. Country or Parish, State
Lea, New Mexico

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.)

Harvard Petroleum proposes to plug the well as follows:

MIRU Pulling Unit. POH w/ rods and tubing
Set CIBP @ 7020' and cap with 35' bailed on top of CIBP OR 25 sx class H spotted on top of CIBP - Perfs
Load hole with plugging mud and test casing to 500 psi.
Pump 35 sx class C @ 4687'; 4333-4687', WOC and tag - Top Delaware and 8 5/8" casing shoe
Perf and squeeze 35 sx class C @ 1302'; 1049-1302' WOC and tag - Top of Salt
Perf and squeeze 35 sx @ 630'; 495-630' WOC and tag - 11 3/4" casing shoe
Perf and squeeze app 200 sx class C @ 200' - Surface to 200' - Surface plug

After plugging operations the casing will be cut off 3' below ground level, a steel plate will be welded on top of the casings and a dry hole marker will be installed. The location will then be cleaned and re-mediated to BLM standards.

Attachments: Current Wellbore Diagram, Proposed Wellbore Diagram

Approval Subject to

General Requirements and

Special Stipulations

Attached

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Phelps White

Consultant

Title

Signature

Date

01/30/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

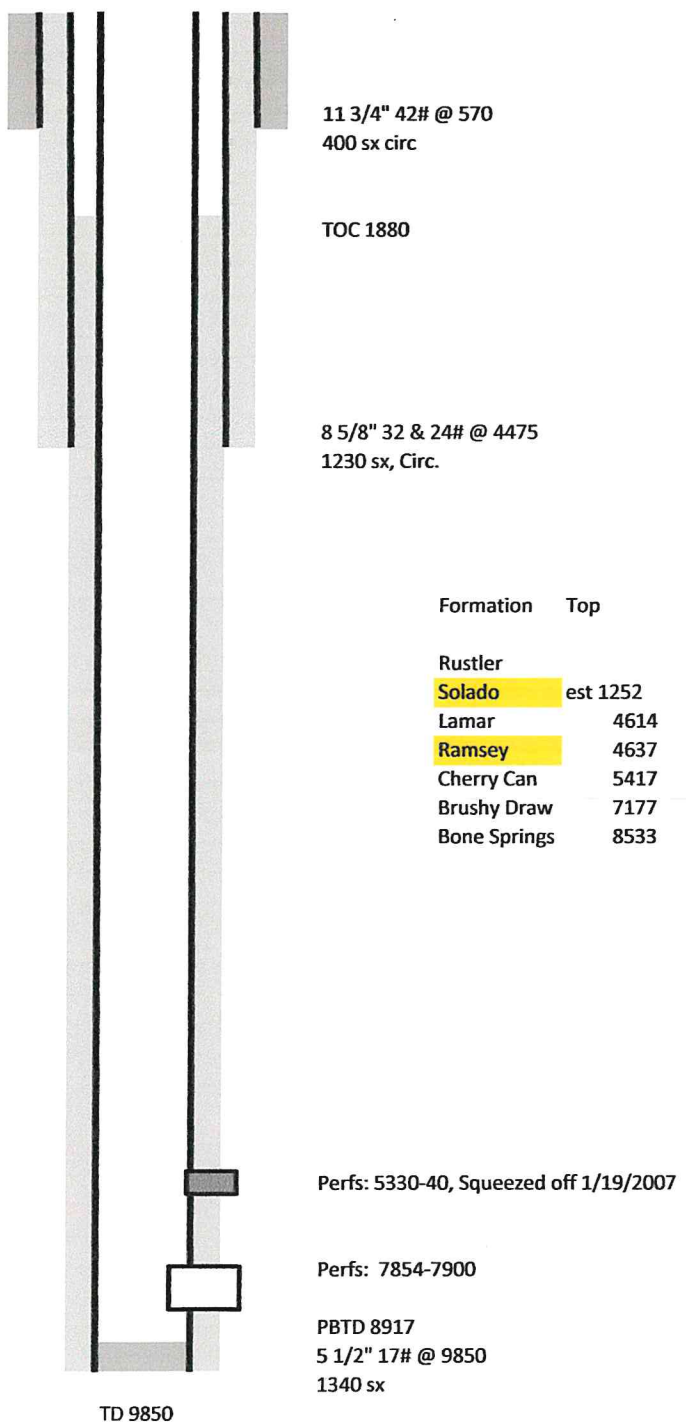
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Well Bore Diagram Worksheet

Operator: Harvard Petroleum Co. Date Spud: 1/11/2007
Well Name: SDE 19 Fed 4 Date Complete: 2/8/2007
API #: 30-025-32909
Location: 19, 23S, 32E

Current Wellbore



Well Bore Diagram Worksheet

Operator: Harvard Petroleum Co.
Well Name: SDE 19 Fed 4
API #: 30-025-32909
Location: 19, 23S, 32E

Date Spud: 1/11/2007
Date Complete: 2/8/2007

PROPOSED PLUGS

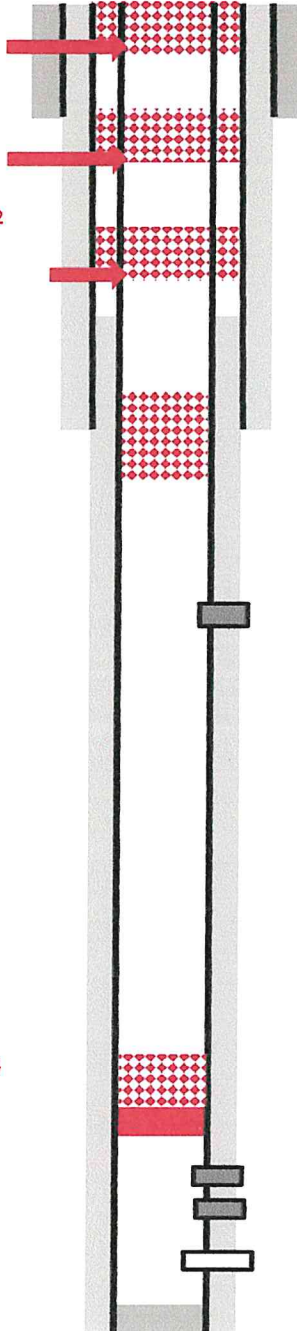
60 sx class C @ 200
Surface to 200'
Perf 200'

35 sx class C @ 630
495-630 TAG
Perf 630'

35 sx class C @ 1302
1049-1302 TAG
Perf 1302

35 sx class C @ 4687
4333 to 4687 TAG

25 sx class H @ 7804
6767-7020 TAG
CIBP @ 7020



TD 9850

11 3/4" 42# @ 570
400 sx circ

TOC 1880

8 5/8" 32 & 24# @ 4475
1230 sx, Circ.

Perfs: 5330-40, Squeezed off 1/19/2007

Formation est 1252

| | |
|--------------|----------|
| Rustler | |
| Solado | est 1252 |
| Lamar | 4614 |
| Ramsey | 4637 |
| Cherry Can | 5417 |
| Brushy Draw | 7177 |
| Bone Springs | 8533 |

Perfs: 7070-7507, Squeezed off
Perfs 7608-7862, Squeezed off

Perfs 8270-8358' Open
PBSD 8917
5 1/2" 17# @ 9850
1340 sx

Approval Subject to
General Requirements and
Special Stipulations
Attached

**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Permanent Abandonment of Federal Wells
Conditions of Approval (LPC Habitat)**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-689-5981.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Below Ground Level Cap (Lesser Prairie-Chicken Habitat): All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.** Upon the plugging and subsequent abandonment of wells that are located in lesser prairie-chicken habitat, the casings shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. A weep hole shall be left in the plate and/or casing.

NMOCD also requires the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a below ground cap was installed as required in the COA's from the BLM.

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.

Timing Limitation Stipulation/ Condition of Approval for Lesser Prairie-Chicken:

From March 1st through June 15th annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
620 E. Greene St.
Carlsbad, New Mexico 88220-6292
www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo “interim” reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo “final” reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any/all contaminants, scrap/trash, equipment, pipelines and powerlines **(Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure)**. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip (across the slope and seed as specified in the original APD COA. **This will apply to well pads, facilities, and access roads.** Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you

have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos
Supervisory Petroleum Engineering Tech/Environmental Protection Specialist
575-234-5909 (Office), 575-361-2648 (Cell)

Arthur Arias
Environmental Protection Specialist
575-234-6230

Crisha Morgan
Environmental Protection Specialist
575-234-5987

Jose Martinez-Colon
Environmental Protection Specialist
575-234-5951

Mark Mattozzi
Environmental Protection Specialist
575-234-5713

Robert Duenas
Environmental Protection Specialist
575-234-2229

Trishia Bad Bear, Hobbs Field Station
Natural Resource Specialist
575-393-3612

| Sundry ID | | 2715553 | | | | | |
|-------------------------------------|---------|---------|--------|--|--------|--------------|---|
| Plug Type | Top | Bottom | Length | Tag | Sacks | Cement Class | Notes |
| Surface Plug | 0.00 | 100.00 | 100.00 | Tag/Verify | 25.00 | C | Perforate and squeeze from 100' to surface. Verify at surface. (In 10 sxs/Out 15 sxs) |
| Shoe Plug | 514.30 | 620.00 | 105.70 | Tag/Verify | | | |
| Top of Salt @ 1203 | 1140.97 | 1254.00 | 113.03 | Tag/Verify | 172.00 | C | Perforate and squeeze from 1254' to 514'. (In 74 sxs/Out 98 sxs) WOC and Tag. |
| Base of Salt @ 4347 | 4253.53 | 4397.00 | 143.47 | Tag/Verify | | | |
| Shoe Plug | 4380.25 | 4525.00 | 144.75 | Tag/Verify | | | |
| Delaware @ 4658 | 4561.42 | 4708.00 | 146.58 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 45.00 | C | Spot cement from 4708' to 4253'. WOC and Tag. |
| Top of squeezed perforations @ 5330 | 5226.70 | 5380.00 | 153.30 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |

| | | | | | | | |
|--|---------|---------|--------|--|-------|---|---|
| Bottom of squeezed perforations @ 5340 | 5236.60 | 5390.00 | 153.40 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 25.00 | C | Spot cement from 5390' to 5226'. WOC and Tag. |
| Top of squeezed perforations @ 7070 | 6949.30 | 7120.00 | 170.70 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| Bottom of squeezed perforations @ 7862 | 7733.38 | 7912.00 | 178.62 | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | 96.00 | C | Spot cement from 7912' to 6949'. WOC and Tag. |

| | | | | | | | |
|---------------------------------------|---------|---------|--------|--|-------|---|---|
| | | | | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| CIBP Plug | 8185.00 | 8220.00 | 35.00 | | 25.00 | H | Set CIBP at 8220'. Spot 25 sxs on top. Leak Test CIBP. |
| Perforations Plug (If No CIBP) | 8220.00 | 8408.00 | 188.00 | Tag/Verify | | | |
| | | | | If solid base no need to Tag (CIBP present and/or Mechanical Integrity Test), If Perf & Sqz then Tag, Leak Test all CIBP if no Open Perforations | | | |
| Bonesprings @ 8533 | 8397.67 | 8583.00 | 185.33 | | 25.00 | H | Tag PBTD and circulate. Spot cement from 8583' to 8397'. WOC and Tag. |
| Shoe Plug | 9701.50 | 9900.00 | 198.50 | Tag/Verify | | | |

No more than 2000' is to be allowed between plugs in open hole, and no more than 3000' between plugs in cased hole.

Class H >7500'

Class C <7500'

Fluid used to mix the cement in R111P shall be saturated with the salts common to the section penetrated, and in suitable proportions, but not more than 3% calcium chloride by weight of cement will be considered the desired mixture whenever possible.

Medium, Secretary: Top of salt to surface If no salt take the deepest fresh water or Karst Depth

High, Critical: Bottom of Karst to surface or Deepest fresh water, whichever is greater

R111P: 50 Feet from Base of Salt to surface.

Class C: 1.32 ft³/sx

Class H: 1.06 ft³/sx

Onshore Order 2.III.G Drilling Abandonment Requirements: "All formations bearing usable-quality water, oil, gas, or geothermal resources, and/or a prospectively valuable deposit of minerals shall be protected.

| | | | |
|--------------------------|---------|-----------------------|---------|
| Cave Karst/Potash Cement | Low | | |
| Shoe @ | 570.00 | | |
| Shoe @ | 4475.00 | | |
| Shoe @ | 9850.00 | TOC @ | 1600.00 |
| Perforatons Top @ | 8270.00 | Perforations Bottom @ | 8358.00 |
| | | CIBP @ | 8220.00 |

Well Bore Diagram Worksheet

Operataor: Harvard Petroleum Co.

Well Name: SDE 19 Fed 4

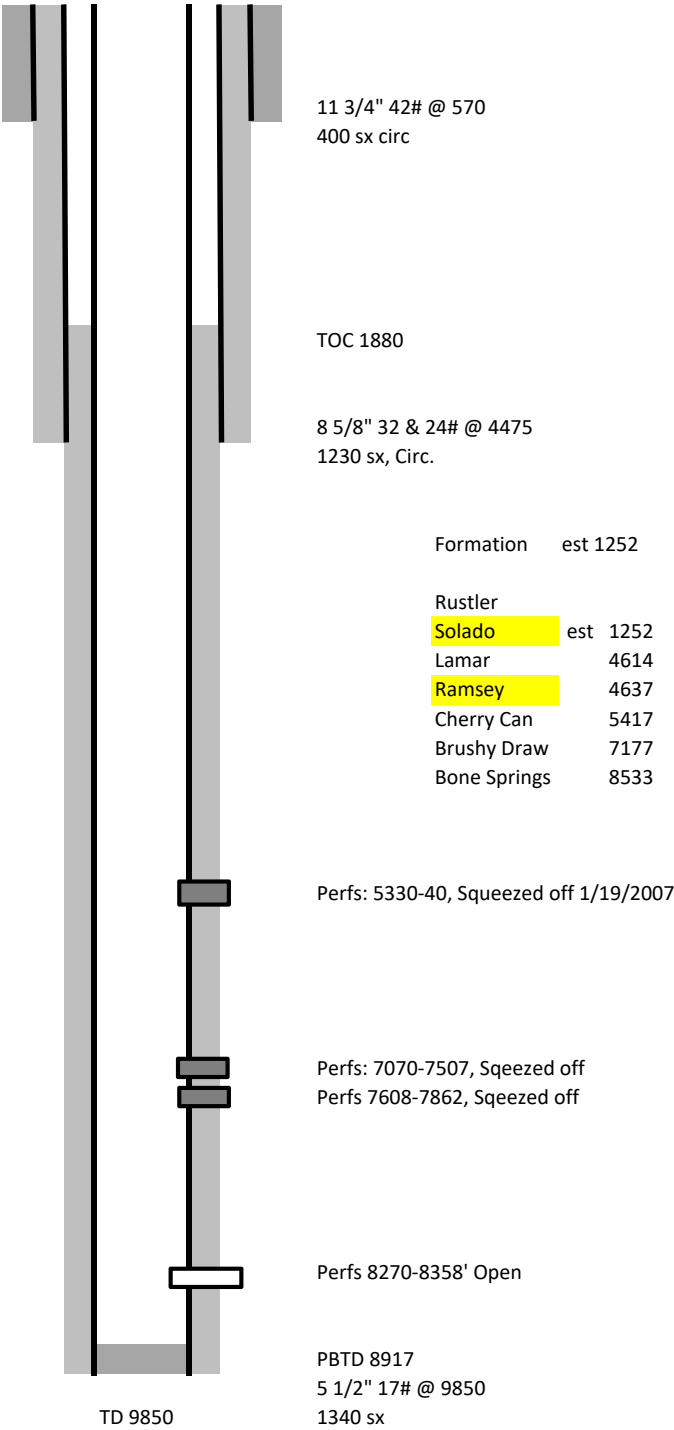
API # 30-025-32909

Location: 19, 23S, 32E

Date Spud: 1/11/2007

Date Complete: 2/8/2007

CURRENT WELLBORE



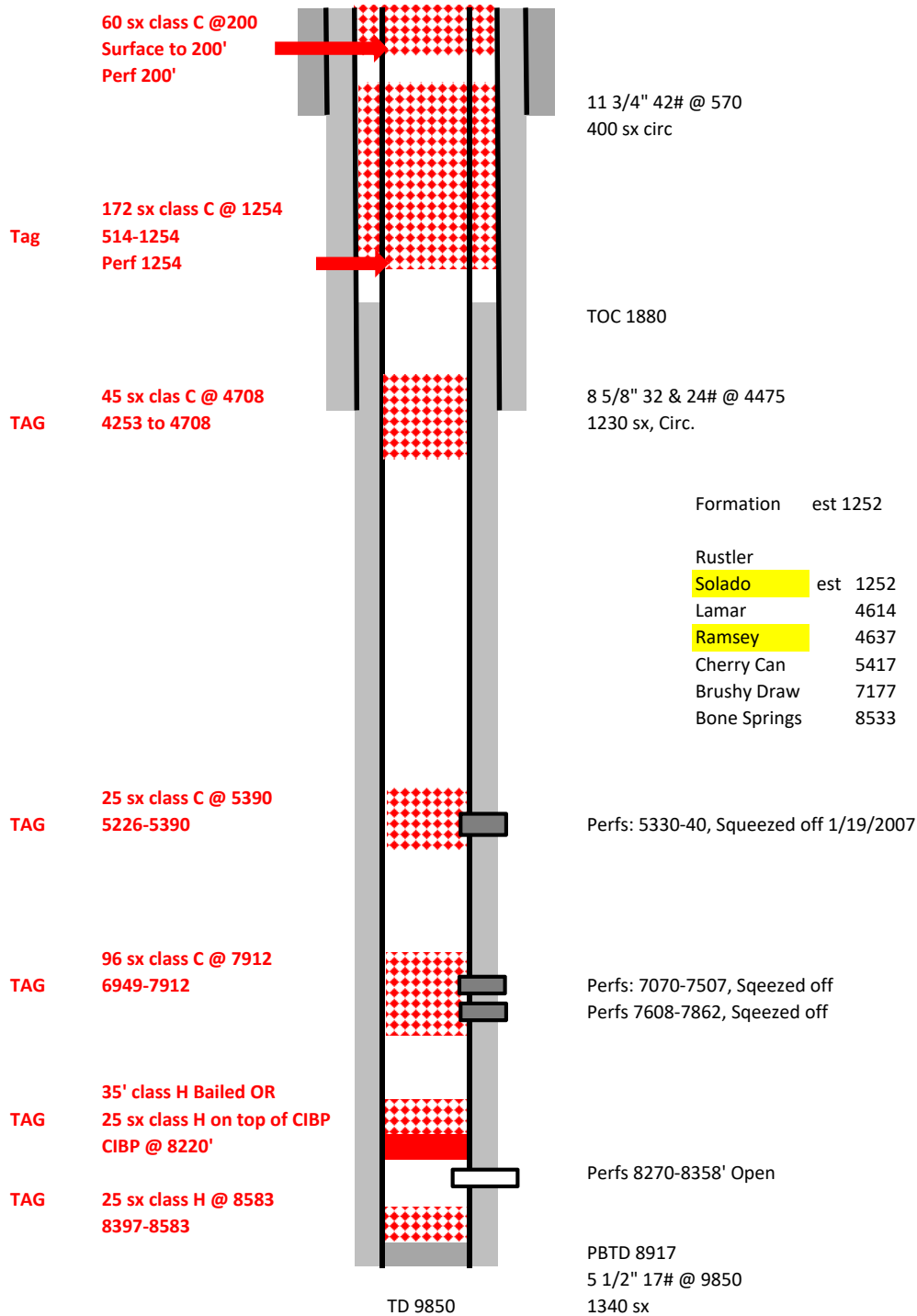
Well Bore Diagram Worksheet

Operator: Harvard Petroleum Co.
 Well Name: SDE 19 Fed 4
 API #: 30-025-32909
 Location: 19, 23S, 32E

Date Spud: 1/11/2007
 Date Complete: 2/8/2007

WELLBORE DIAGRAM BUILT TO MEET BLM ORDERS

PROPOSED PLUGS



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 209817

CONDITIONS

| | |
|--|---|
| Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202 | OGRID: 10155 |
| | Action Number: 209817 |
| | Action Type: [C-103] NOI Plug & Abandon (C-103F) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|-----------|----------------|
| john.harrison | None | 5/15/2023 |