Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMSF080565

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No. FLORANCE FED/2

2. Name of Operator LOGOS OPERATING LLC

9. API Well No. 3003906178

3a. Address 2010 AFTON PLACE, FARMINGTON, NM 87401

3b. Phone No. *(include area code)* (505) 278-8720

10. Field and Pool or Exploratory Area TAPACITO/TAPACITO

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 5/T25N/R3W/NMP

11. Country or Parish, State RIO ARRIBA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 perfonned 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 recompletion 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 detennined that the site is ready for final inspection.)

Please see attached P&A Procedure for the Florence Federal 2

Accepted for record – NMOCD
JRH 05/02/2023

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* DACYE SHULL / Ph: (505) 324-4145

Title REGULATORY TECH

Signature

Date 03/22/2023

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by KENNETH G RENNICK / Ph: (505) 564-7742 / Approved

Title Petroleum Engineer

Date 04/05/2023

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 RIO PUERCO

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)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NENE / 1579 FNL / 912 FEL / TWSP: 25N / RANGE: 3W / SECTION: 5 / LAT: 36.431458 / LONG: -107.162449 (TVD: 0 feet, MD: 0 feet)

BHL: NENE / 1579 FNL / 912 FEL / TWSP: 25N / SECTION: / LAT: 36.431458 / LONG: 107.162449 (TVD: 0 feet, MD: 0 feet)

LOGOS OPERATING

Proposed Plug and Abandonment Procedure

Florance Federal 2

API: 30-039-06178

Notes:

- LOGOS requests to P&A the subject well.
- All cement volumes use 100% excess outside pipe and 50' excess inside.
- All cement will be Class G with a 1.15 cf/sk yield or equivalent.
- All plugs are subject to change pending CBL results.

1. Comply with all NMOCD, BLM, and LOGOS safety rules and regulations. Conduct safety meeting for all personnel on location.
2. MOL and RU. Lay flow lines. Check and record bradenhead and casing pressures.
3. POOH tubing and stand back joints that pass visual inspection.
4. Set CR above liner top at ~3772' or within 40' higher.
5. Roll hole with fresh water and pressure test the casing to 560 psi for 15 minutes.
    a. If pressure test fails, WOC and tag and record each plug top and top off with more cement if necessary.
6. Conduct cement bond log from the CR at 3772' to surface.
7. **Send cement bond log results to NMOCD and BLM to verify cement volumes and inside/outside plugs.**
8. **Plug #1: 3460'-3772' (Perforations: 3832' / TOL: 3782' / Fruitland top: 3650' / Kirtland top: 3580' / Ojo Alamo top: 3510'):** Mix and spot 42 sx Class G cement.
9. **Plug #2: 1012'-1112' (Nacimiento top: 1062'):** Perforate squeeze holes at 1112'. Attempt to establish rate. TIH and set 5.5" CR at 1062'. Mix and pump 49 sx Class G cement, squeeze 31 sx outside casing and leave 18 sx inside casing.
10. **Plug #3: 0'-145' (Surface casing shoe: 95'):** Perforate squeeze holes at 145'. Attempt to establish rate. TIH and set 5.5" CR at 95'. Mix and pump 63 sx Class G cement, squeeze 39 sx outside casing and leave 24 sx inside casing.
11. ND BOP and cut off wellhead below surface casing flange. Top off with cement if needed. Install P&A marker with cement per regulations. Photograph P&A marker in place. Cut off anchors and restore location per BLM stipulations.

LOGOS OPERATING

Florance Federal 2 - P&A Planning

Formations	Tops (ft)
Surface	95
Nacimiento	1062
Ojo Alamo	3510
Kirtland	3580
Fruitland	3650
CR	3772
TOL	3782
Pictured Cliffs	3830

5.5" csg capacity (ft3/ft)	0.1336
5.5" csg / 7.875" hole capacity (ft3/ft)	0.1733
5.5" csg / 8.625" csg capacity (ft3/ft)	0.1856
Yield (ft3/sk)	1.15

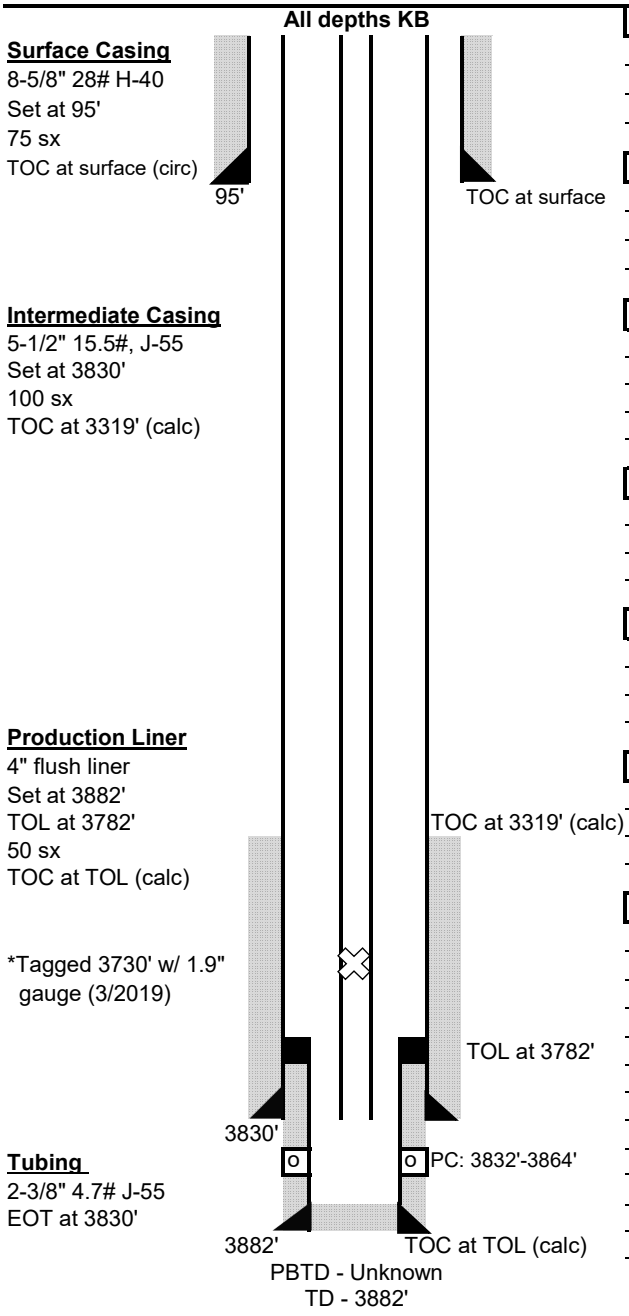
Plugs	Reason	Inside/Outside	Top	Bottom	Total Length of Plug (ft)	Inside Csg Volume (cf/ft)	Outside Csg Volume (cf/ft)	# of sx inside (1.15 yield & 50' excess)	# of sx outside (1.15 yield & 100% excess)	Total # sx
1	CR/TOL/Perforations /Fruitland/Kirtland/ Ojo top	Inside	3460	3772	312	0.1336	0.1733	42	0	42
2	Nacimiento	Inside/Outside	1012	1112	100	0.1336	0.1733	18	31	49
3	Surface	Inside/Outside	0	145	145	0.1336	0.1856	24	39	63

Total Cmt	154

LOGOS OPERATING

Wellbore Schematic

Well Name:	Florance Federal 2	Date Prepared:	3/6/2019 Hespe
Location:	Sec 05, T25N, R03W 990' FNL & 990' FEL	Reviewed By:	2/15/2023 Moss
County:	Rio Arriba	Last Updated:	2/15/2023 Moss
API #:	30-039-06178	Spud Date:	9/17/1955
Co-ordinates:	(Lat) 36.431458°, (Long) -107.162449° NAD83	Completion Date:	08/1964
Elevations:	GROUND: 7189'	Last Workover Date:	08/1965
	KB: 7196'		
Depths (KB):	PBTD: Unknown		
	TD: 3882'		



Surface Casing: (9/17/1955)
Drilled a surface hole to 95'. Set 8-5/8" 28# H-40 casing at 95'.
Cemented w/ 75 sx. Circulated cmt to surface.

Intermediate Casing: (10/2/1955)
Drilled a intermediate hole. Set 5-1/2", 15.5#, J-55 csg at 3830'.
Cemented w/ 100 sx. TOC at 3319' per calc assuming 7-7/8" hole size, 1.18 yld & 75% efficiency.

Production Liner: (8/2/1964)
Drilled production hole to 3882'. Set 100' of 4" flush jt liner at 3882'.
TOL at 3782'. Cemented w/ 50 sx. TOC at 3782' (TOL) per calc assuming 4.75" hole size, 1.18 yield & 75% efficiency.

Tubing:	Length (ft)
KB	7
2-3/8" 4.7# tubing joints	3823
Set at:	3830 ft

Perforations:
PC: (3832'-3864') at 2SPF.
Frac w/ 68,700 gal water & 80,000# 20/40 sand & 30,000# 10/20 sand & 7#/1000 J-2 7 units IR-192 radioactive sand.

Formations:

Nacimiento	1062'	Fruitland	3650'
Ojo Alamo	3510'	Pictured Cliffs	3830'
Kirtland	3580'		

Additional Notes:
10/1955 Initial completion. Assumed they drilled out cmt on bottom of intermediate & produced well via open hole.
08/1964 Drilled ~50' below intermediate & cmt'd 4" liner. Stim'd the PC.
03/2019 Swab Report. Csg 40#, tbg 0#. Tagged fluid at 1600'. Made 3 swab runs, didn't recover any fluid, cups were getting cut by trash that looks like liquid cement. Took sample of trash. Each run was hanging up while pulling up. RIH w/ 1.9" gauge & tagged 3730'. Ran 1.5" gauage & tagged 3730'. Rig down.

No pit or separator on location.

LOGOS OPERATING

Proposed P&A Wellbore Schematic

Well Name:	Florance Federal 2	Date Prepared:	3/6/2019 Hespe
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County:	Rio Arriba	Last Updated:	2/15/2023 Moss
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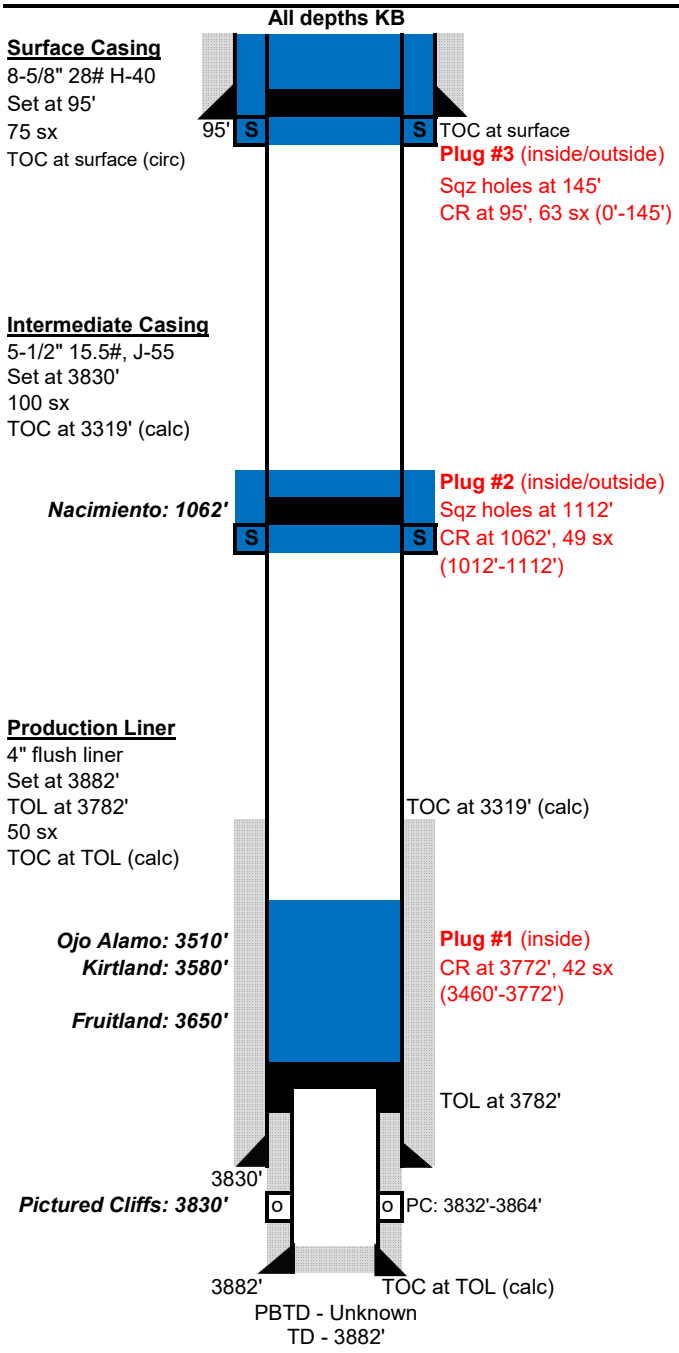
Co-ordinates:	(Lat) 36.431458°, (Long) -107.162449° NAD83	Completion Date:	08/1964
Elevations: GROUND:	7189'	Last Workover Date:	08/1965
KB:	7196'		
Depths (KB): PBTD:	Unknown		
TD:	3882'		



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KB	7

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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 204647

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 204647
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
john.harrison	Adhere to BLM approved COAs and plugs. See BLM COAs and GEO report.	5/2/2023