

Well Name: WEST BISTI UNIT	Well Location: T26N / R13W / SEC 34 / NWNW / 36.450119 / -108.212387	County or Parish/State: SAN JUAN / NM
Well Number: 144	Type of Well: INJECTION - ENHANCED RECOVERY	Allottee or Tribe Name:
Lease Number: NMSF078156	Unit or CA Name: WEST BISTI UNIT	Unit or CA Number: NMNM78448X
US Well Number: 300450564200S1	Well Status: Water Injection Well	Operator: DUGAN PRODUCTION CORPORATION

Notice of Intent

Sundry ID: 2726987

Type of Submission: Notice of Intent

Date Sundry Submitted: 04/20/2023

Date proposed operation will begin: 05/29/2023

Type of Action: Plug and Abandonment

Time Sundry Submitted: 03:55

Procedure Description: Dugan Production Corp plans to plug to abandon the well per the following procedure: 1) TOO H w/2-3/8", 4.7# J-55 Nu-Lock tubing. Tally tubing. Run 3½" casing scraper to 4850'. 2) TIH and set 3½" cement retainer @ 4840' (End of 3½", 9.3# liner @ 4865'). Load casing. Pressure test casing to 600 psi above the CR. Run CBL from 4840' to surface to determine TOC behind original 5½" casing. Plugs are written with original TOC behind the original 5½" casing from temperature survey @ 4465'. 5½" casing has been squeezed and repaired, and 3½", 9.3# liner was run and cemented from surface to 4865' later. A CBL will be run to determine cement behind casing. Will make necessary changes to the plugs after determining the cement bonding behind casing. 3) Sting in cement retainer @ 4840'. Spot and squeeze cement, under and above cement retainer w/28 sks (32.2 cu ft) Class G neat cement. 18 sks (20.7 cu ft) under the retainer to cover from 4840' to top of injection perforation @ 4990' inside the 5½" casing. Sting out of the retainer and spot 10 sks (11.5 cu ft) above the CR inside 3½" liner to cover top of Gallup from, 4840' to 4610'. Plug I, inside, 28 sks, 32.2 cu ft, Gallup, 4610'-4990'. 4) Perforate @ 3888'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Mancos top from 3888' to 3738'. Plug II, inside/outside, 40 sks, 46 cu ft, Mancos, 3738'-3888'. 5) Perforate @ 2012'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Mesaverde top from 2012' to 1862'. Plug III, inside/outside, 40 sks, 46 cu ft, Mesaverde, 1862'-2012'. 6) Perforate @ 1364'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Chacra top from 1364' to 1214'. Plug IV, inside/outside, 40 sks, 46 cu ft, Chacra, 1214'-1364'. 7) Perforate @ 1218'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Pictured Cliffs top from 1218' to 1068'. Plug V, inside/outside, 40 sks, 46 cu ft, Pictured Cliffs, 1068'-1218'. 8) Perforate @ 900'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Fruitland top from 900' to 750'. Plug VI, inside/outside, 40 sks, 46 cu ft, Fruitland, 700'-950'. 9) Perforate @ 248'. Spot and circulate cement to surface w/82 sks Class G, 94.3 cu ft to cover the Kirtland-Ojo Alamo & surface casing shoe. Circulate cement to surface through BH. Plug VII, inside/outside, 82 sks, 94.3 cu ft, Kirtland-Ojo Alamo-Surface, 0'-248'. 10) Cut wellhead. Tag top of cement inside 3½" casing and in the annulus. 11) Install dry hole marker. Clean location and move.

Accepted for record – NMOCD

JRH — 05/02/2023 —

Received by OCD: 4/28/2023 7:22:39 AM

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Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- WBU_144_Reclamation_Plan_20230420154906.pdf
- WBU_144_PA_formation_tops_20230420154852.pdf
- WBU_144_PA_planned_wellbore_schematic_20230420154833.pdf
- WBU_144_PA_current_wellbore_schematic_20230420154813.pdf
- WBU_144_PA_planned_procedure_20230420154735.pdf

Conditions of Approval

Specialist Review

- General_Requirement_PxA_20230427172402.pdf
- 2726987_NOIA_144_3004505642_KR_04272023_20230427172352.pdf
- 26N13W34_West_Bisti_Unit_144_Geo_KGR_20230427172352.pdf

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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: TYRA FEIL	Signed on: APR 20, 2023 03:47 PM
Name: DUGAN PRODUCTION CORPORATION	
Title: Authorized Representative	
Street Address: PO Box 420	
City: Farmington	State: NM
Phone: (505) 325-1821	
Email address: tyrafeil@duganproduction.com	

Field

Representative Name: ALIPH REENA		
Street Address: PO BOX 420		
City: FARMINGTON	State: NM	Zip: 87499-0420
Phone: (505)325-1821		
Email address: Aliph.Reena@duganproduction.com		

BLM Point of Contact

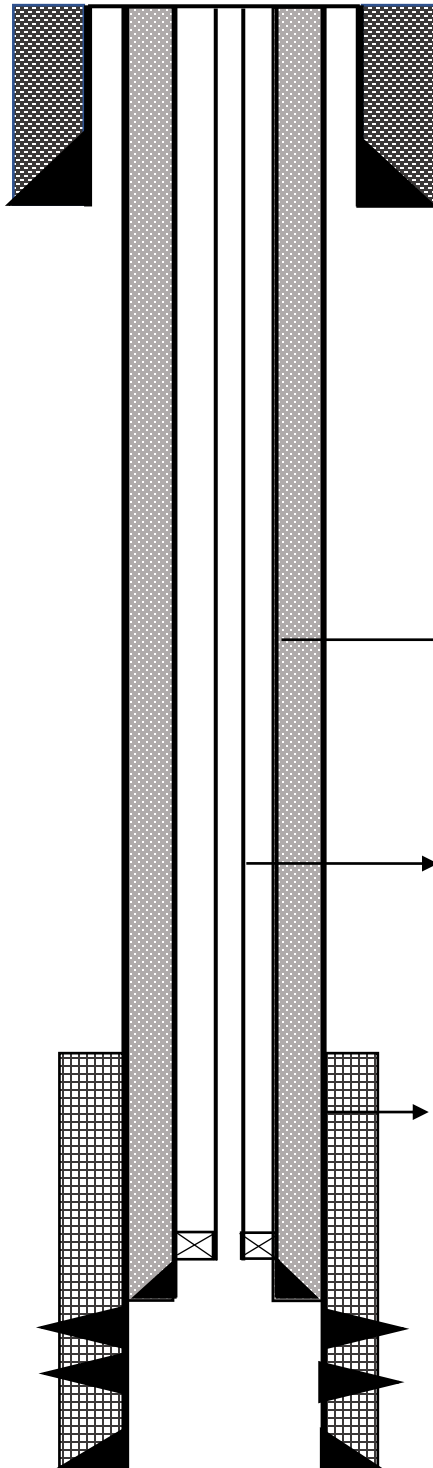
BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 04/27/2023
Signature: Kenneth Rennick	

Dugan Production Corp plans to plug to abandon the well per the following procedure:

- TOO H w/2-3/8", 4.7# J-55 Nu-Lock tubing. Tally tubing. Run 3½" casing scraper to 4850'.
- TIH and set 3½" cement retainer @ 4840' (End of 3½", 9.3# liner @ 4865'). Load casing. Pressure test casing to 600 psi above the CR. Run CBL from 4840' to surface to determine TOC behind original 5½" casing. Plugs are written with original TOC behind the original 5½" casing from temperature survey @ 4465'. 5½" casing has been squeezed and repaired, and 3½", 9.3# liner was run and cemented from surface to 4865' later. A CBL will be run to determine cement behind casing. Will make necessary changes to the plugs after determining the cement bonding behind casing.
- Sting in cement retainer @ 4840'. Spot and squeeze cement, under and above cement retainer w/28 sks (32.2 cu ft) Class G neat cement. 18 sks (20.7 cu ft) under the retainer to cover from 4840' to top of injection perforation @ 4990' inside the 5½" casing. Sting out of the retainer and spot 10 sks (11.5 cu ft) above the CR inside 3½" liner to cover top of Gallup from, 4840' to 4610'. **Plug I, inside, 28 sks, 32.2 cu ft, Gallup, 4610'-4990'.**
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- Perforate @ 1218'. Spot and squeeze inside outside plug w/40 sks, 46 cu ft, Class G neat cement. 32 sks (36.8 cu ft) outside, 8 sks (9.2 cu ft) inside the 3½" casing to cover Pictured Cliffs top from 1218' to 1068'. **Plug V, inside/outside, 40 sks, 46 cu ft, Pictured Cliffs, 1068'-1218'.**
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- Cut wellhead. Tag top of cement inside 3½" casing and in the annulus.
- Install dry hole marker. Clean location and move.

Current Wellbore Schematic

West Bisti Unit # 144
API: 30-045-05642
Sec 34, T26N & R13W
660 FNL & 660 FWL
San Juan County, NM
Lat:36.4501648 Long:-108.2132034

**Surface Casing**

9-5/8" 32.3 # Casing @ 198'
Cemented w/ 175 sks
Hole size: 13-3/4"
TOC Should be at surface
from 75% gauged hole/Cement volume calculation

Injection Liner

3 1/2" Liner from surface to 4865'. Cemented to surface.
Circulated cement.

Injection Tubing

2-3/8" IPC Coated tubing w/ Baker C-1 Packer
Packer Set @ 4850'

Original Production Casing

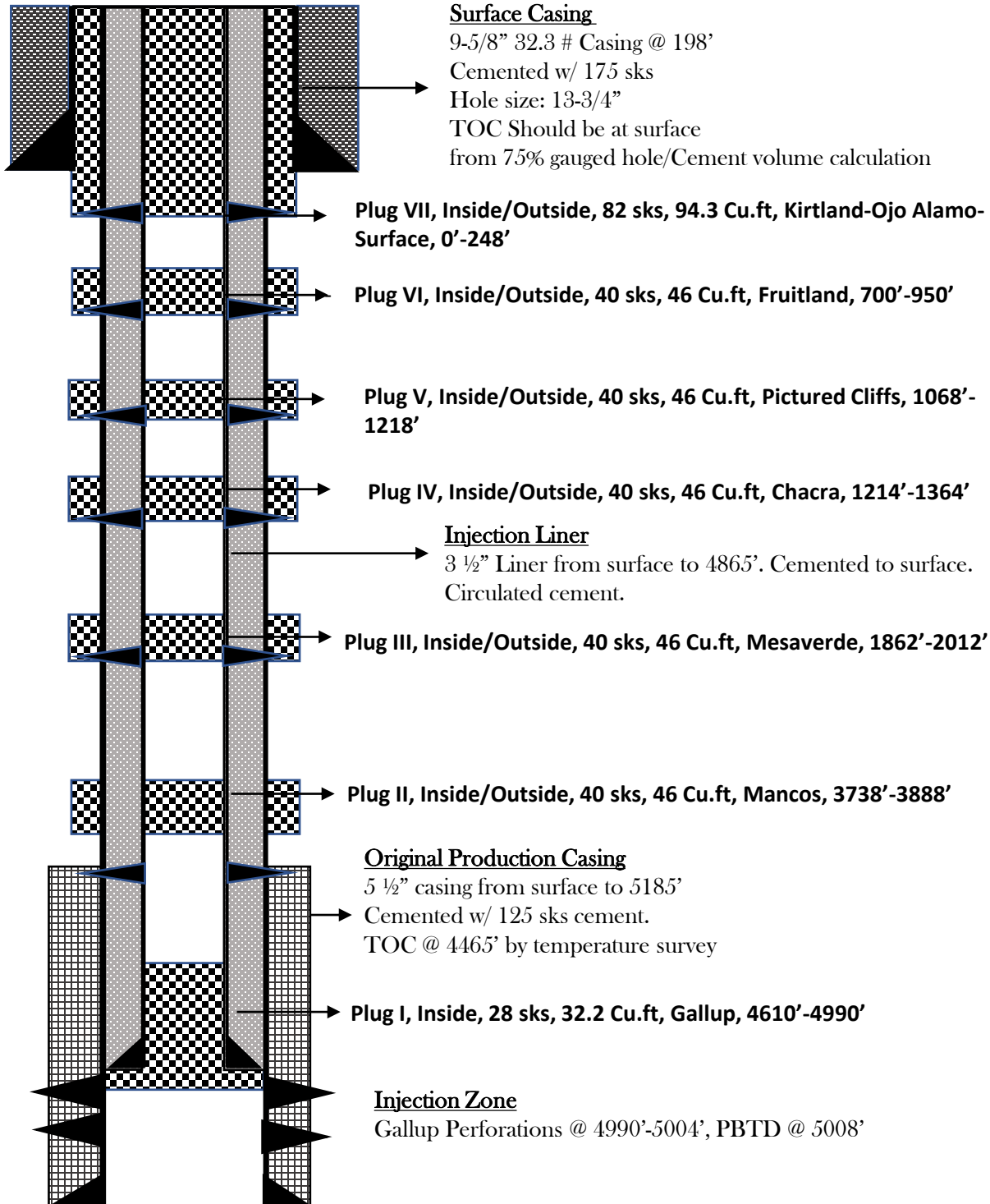
5 1/2" casing from surface to 5185'
Cemented w/ 125 sks cement.
TOC @ 4465' by temperature survey

Injection Zone

Gallup Perforations @ 4990'-5004', PBTD @ 5008'

P & A'd Wellbore Schematic

West Bisti Unit #144
API: 30-045-05642
Sec 34, T26N & R13W
660 FNL & 660 FWL
San Juan County, NM
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West Bisti Unit #144
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Formation Tops

- Ojo Alamo – Surface
- Kirtland – 125
- Fruitland – 850
- Pictured Cliffs – 1168
- Chacra – 1314
- Mesaverde – 1962
- Mancos – 3838
- Gallup - 4710

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

AFMSS 2 Sundry ID 2726987

Attachment to notice of Intention to Abandon

Well: West Bisti Unit 144

CONDITIONS OF APPROVAL

1. Plugging operations must be completed by December 31, 2023.
2. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
3. 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 04/27/2023

**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), through the Automated Fluid Minerals Support System (AFMSS) 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.

BLM FLUID MINERALS P&A Geologic Report

Date Completed: 04/27/2023

Well No. West Bisti Unit 144 (API 30-045-05642)	Location	NWNW			
Lease No. NMSF078156	Sec. 34	T26N			R13W
Operator Dugan Production Corporation	County	San Juan	State		New Mexico
Total Depth 5185'	PBTD 5128'	Formation	Gallup		
Elevation (GL) 6270'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/freshwater sands
Nacimiento Fm					Possible freshwater sands
Ojo Alamo Ss					Aquifer (possible freshwater)
Kirtland Shale	125				
Fruitland Fm			850		Coal/Gas/Possible water
Pictured Cliffs Ss			1168		Gas
Lewis Shale					
Chacra			1314		Gas
Cliff House Ss			1962		Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale			3838		
Gallup			4710		O&G/Water
Greenhorn					
Graneros Shale					
Dakota Ss					O&G/Water

Remarks:
P & A

Reference Well:

Prepared by: Kenneth Rennick

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 211562

CONDITIONS

Operator: DUGAN PRODUCTION CORP PO Box 420 Farmington, NM 87499	OGRID: 6515
	Action Number: 211562
	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 GEO report.	5/2/2023