

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Well Name: SEOUL

Well Location: T23N / R10W / SEC 9 /
NENE / 36.247559 / -107.893219

County or Parish/State: SAN
JUAN / NM

Well Number: 88

Type of Well: OIL WELL

Allottee or Tribe Name:
EASTERN NAVAJO

Lease Number: N00C14207312

Unit or CA Name:

Unit or CA Number:

US Well Number: 300452663000S1

Operator: DUGAN PRODUCTION
CORPORATION

Notice of Intent

Sundry ID: 2784343

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 04/10/2024

Time Sundry Submitted: 01:39

Date proposed operation will begin: 05/13/2024

Procedure Description: Dugan Production plans to plug & abandon referenced well. Procedure is attached.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Seoul_88_Rec_Plan_20240410133451.pdf

Seoul_88_proposed_PA_formation_tops_20240410133434.pdf

Seoul_88_proposed_PA_planned_wellbore_schematic_20240410133427.pdf

Seoul_88_proposed_PA_current_wellbore_schematic_20240410133418.pdf

Seoul_88_proposed_PA_planned_work_20240410133406.pdf

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US Well Number: 300452663000S1

Operator: DUGAN PRODUCTION CORPORATION

Conditions of Approval

Authorized

General_Requirement_PxA_20240426151155.pdf

2784343_NOIA_88_3004526630_KR_04262024_20240426151141.pdf

Seoul_88_Geo_Rpt_WG_KR_Edited_20240426151141.pdf

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 10, 2024 01:33 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)360-9192

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: 04/26/2024

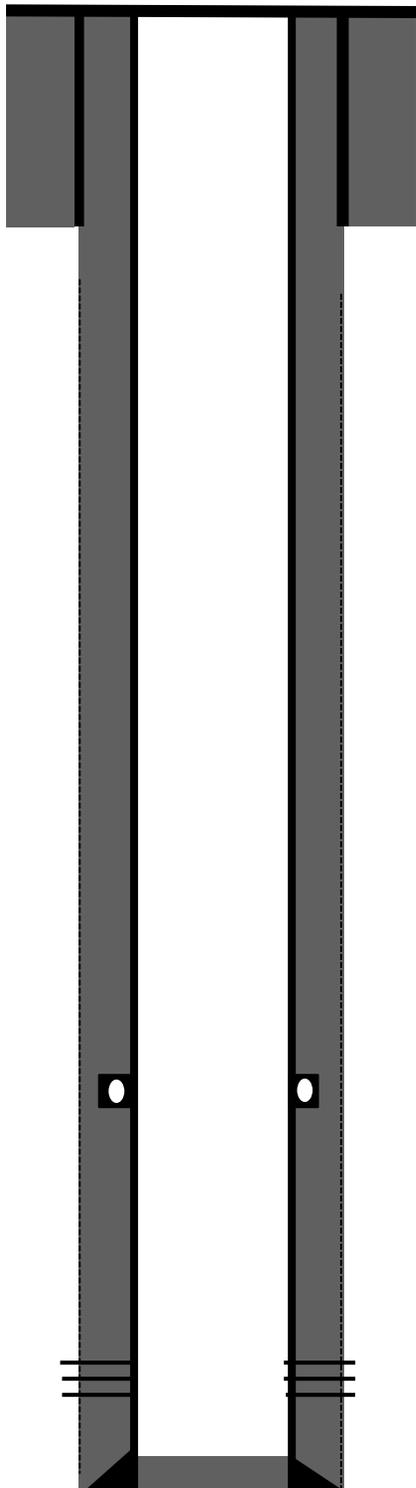
Signature: Kenneth Rennick

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

- PU & tally 2-3/8" workstring. Run 4½" casing scraper to 4350'. RIH & set 4½" CIBP @ 4335'. Gallup perforations @ 4385'-4657'.
- Load and circulate hole and Run CBL from 4335' to surface. All plugs are designed assuming cement behind casing to surface. Will make necessary changes to the plugs after reviewing the CBL.
- Spot Plug I inside 4½" casing from 4335' on top of the BP to 4185' w/12 sks (13.8 cu ft) Class G cement to cover the Gallup perforations. **Plug I, inside 4½" casing, 12 sks, 13.8 cu ft, Gallup perforations, 4185'-4335'.**
- Spot Plug II inside 4½" casing from 3873' to 3457' w/34 sks (39.1 cu ft) Class G cement to cover the Gallup top, DV tool, & Mancos top. **Plug II, inside 4½" casing, 34 sks, 39.1 cu ft, Mancos-DV-Gallup, 3457'-3873'.**
- Spot Plug III inside 4½" casing w/35 sks, 40.25 cu ft, Class G neat cement from 1862' to 1425' to cover the Mesaverde & Chacra top. **Plug III, inside 4½" casing, 35 sks, 40.25 cu ft, Mesaverde-Chacra, 1425'-1862'.**
- Spot Plug IV inside 4½" casing w/12 sks, 13.8 cu ft, Class G neat cement from 1053' to 903' to cover the Pictured Cliffs top. **Plug IV, inside 4½" casing, 12 sks, 13.8 cu ft, Pictured Cliffs, 903'-1053'.**
- Spot Plug V inside 4½" casing from 682' to surface w/54 sks (62.1 cu ft) Class G cement to cover the Ojo Alamo-Kirtland tops & surface casing shoe. **Plug V, inside 4½" casing, 54 sks, 62.1 cu ft, Ojo Alamo-Kirtland-Surface, 0'-682'.**
- Cut wellhead. Tag TOC at surface. Fill cement in case needed.
- Install dryhole marker. Clean location.

Current Wellbore Schematic

Seoul #88
API: 30-045-26630
Unit A Sec 9 T23N R10W
330' FNL & 330' FEL
San Juan County, NM
Lat:36.2475586 Long:-107.8938141



8-5/8" J-55 24# casing @ 219'. Cemented with 135 sks Class B. Circulated 2 bbls cement to surface

Cemented Stage I w/ 240 sks, 50-50 poz, 305 Cu.ft. **DV tool @ 3603'**. Stage II w/ 625 sks 65-35-12 & 50 sks 50-50 poz, 1445 Cu.ft. Circulated 2 bbls cement to surface.

Gallup Perforated @ 4385'-4657'

4 1/2" 10.5 # casing @ 4750'

Seoul #88

API: 30-045-26630

Unit A Sec 9 T23N R10W

330' FNL & 330' FEL

San Juan County, NM

Lat:36.2475586 Long:-107.8938141

Elevation ASL : 6620'

Formation Tops

- **Ojo Alamo - 84'**
- **Surface Casing - 219'**
- **Kirtland - 290'**
- **Fruitland - 632'**
- **Pictured Cliffs - 1003'**
- **Lewis - 1166'**
- **Chacra - 1525'**
- **Mesaverde - 1812'**
- **Mancos - 3557'**
- **DV tool - 3603'**
- **Gallup - 3823'**

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

AFMSS 2 Sundry ID 2784343

Attachment to notice of Intention to Abandon

Well: Seoul 88

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. The following modifications to your plugging program are to be made:
 - a. Move the Plug 1 TOC to 4095' to account for the BLM geologist's pick for the Gallup top at 4195'.
 - b. Modify Plug 2 to account for the BLM geologist's pick for the Mancos Shale top at 3475'. Move the BOC to 3653' and the TOC to 3375'.
 - c. Modify Plug 3 to account for the BLM geologist's picks for the Cliff House formation (at 2075') and Chacra tops (upper at 1427'). Move the BOC to 2125' and the TOC to 1327'. Alternatively, the Cliff House and Chaca (upper) may be covered by separate plugs.
 - d. Modify Plug 4 to account for the BLM geologist's Pictured Cliffs pick at 966'. Move the BOC to 1016' and the TOC to 866'.
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 04/26/2024

**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 - FFO - Geologic Report

Date Completed 4/26/2024

Well No. Seoul/88 Surf. Loc. 330 FNL 330 FEL
 Sec 9 T23N R10W

Lease No. N00C14207312

Operator Dugan Production Co. County San Juan State New Mexico
 TVD 4750 PBSD 4750 Formation: Bisti South Gallup
 Elevation GL 6620 Elevation Est. KB 6632

Geologic Formations	Est. tops Subsea Elev.		Remarks
Nacimiento Fm.	Surface		Surface /fresh water sands
Ojo Alamo Ss	BSC- 84		Fresh water aquifer
Kirtland Fm.	262	6370	
Fruitland Fm.	632	6000	Coal/gas/possible water
Pictured Cliffs	966	5666	Possible gas/water
Lewis Shale (Main)	1095	5537	Source rock
Huerfanito Bentonite	1217	5415	Reference bed
Chacra (upper)	1427	5205	Possible gas/water
Lewis Shale Stringer	1635	4997	Source rock
Chacra (lower)	1715	4917	Possible gas/water
Lewis Shale Stringer	1815	4817	Source rock
La Ventana Member	1905	4727	Possible gas/water
Cliff House Ss	2075	4557	Possible gas/water
Menefee Fm.	2265	4367	Coal/water/possible gas
Point Lookout Fm.	3385	3247	Possible gas/water
Mancos Shale	3475	3157	Source rock
DV Tool	3603	3029	
Tocito Ss Lentils	3885	2747	Possible gas/water
Gallup	4195	2437	Oil & gas
Juana Lopez	4335	2297	
Bridge Crk/Greenhorn	4375	2257	
Graneros Shale	4505	2127	
Dakota Ss	4557	2075	Possible gas/water
Morrison Fm.	4665	1967	Possible water

Remarks:

Reference Well:

-Vertical wellbore, all formation depths are TVD from KB at the wellhead.

- BSC: Behind Surface Casing

-Move the Plug 1 TOC to 4095' to account for the BLM geologist's pick for the Gallup top.

-Modify Plug 2 to account for the BLM geologist's pick for the Gallup top. Move the BOC to 3653' and the TOC to 3375'. -- **Should be Mancos top instead of Gallup top. Kenneth Rennick FFO BLM 04/26/2024**

-Modify Plug 3 to account for the BLM geologist's picks for the Cliff House formation and Chacra tops. Move the BOC to 2125' and the TOC to 1327'. Alternatively, the Cliff House and Chacra (upper) may be covered by separate plugs.

- Modify Plug 4 to account for the BLM geologist's Pictured Cliff pick. Move the BOC to 1016' and the TOC to 866'.

- Plug 5 is acceptable.

Dugan Production Co.
 Olympic 4
 810 FSL, 810 FWL, 3M-23N-10W
 GL= 6665', KB=6677'

Prepared by: Walter Gage

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 338344

CONDITIONS

Operator: DUGAN PRODUCTION CORP PO Box 420 Farmington, NM 87499	OGRID: 6515
	Action Number: 338344
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	NMOCD agrees with BLM on picks for formation tops - Extend plug 1 from BLM call for TOC to top of Dakota at 4557 -- Follow BLM modifications b c and d - Fruitland is part of plug V which only shows Kirtland Ojo and surface. - BLM call on Fruitland is 632 - Notify NMOCD 24 hours prior to moving on - Monitor string pressures daily report on subsequent - Any logs ran need to be submitted through our system prior to submitting subsequent. State on subsequent that logs have been submitted.	4/30/2024