Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-045-28653

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Sunco Disposal

1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD Class I

8. Well Number #1

2. Name of Operator
Agua Moss, LLC

9. OGRID Number
247130

3. Address of Operator
PO Box 600 Farmington, NM 87499

10. Pool name or Wildcat
SWD-MV

4. Well Location
Unit Letter__E__:___1595____feet from the _____North___ line and ___1005___feet from the _West_____line
Section 2 Township 29N Range 12W NMPM County San Juan

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
5859'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:		FOT	☒	OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Agua Moss, LLC proposes to perform a FOT as outlined in the attached procedure.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE__Philana Thompson_____ TITLE_____HSE & Regulatory Compliance Specialist_____DATE__7/27/2023_____

Type or print name __Philana Thompson_____ E-mail address: __pthompson@merrion.bz_____ PHONE: _505-486-1171____

For State Use Only

APPROVED BY:_____TITLE_____DATE_____
Conditions of Approval (if any):

AGUA MOSS, LLC — PLAN FOR PRESSURE FALL-OFF TEST (FOT)

Well Information			
Well:	**Sunco Disposal 1**	**Field:**	Mesaverde SWD
Location:	1595' fnl &1005' fwl S2, T29N, R12W San Juan Co. New Mexico	**Elevations:**	5859' GL 5872' RKB
		Depths:	4706' KB PBTD 4760' KB TD
		Engineer:	Shacie Murray (505.330.7605)
API:	30-045-28653	**Date:**	July 27, 2023
Surface Casing:	8- 5/8" @ 209' KB w/ 150sx; Circ to surface	**Production Casing:**	5-1/2" @ 4750' KB w/ 230 sx stage 1, 515 sx stage 2, circ 25 sx to surf, DV tool @ 2244' KB
Tubulars:	2- 7/8" 6.5# EUE (Epoxy Coated) @ 4282' KB	**Packer:**	Arrow XL-W retrievable seal bore @ 4282' KB.
Perforations (MV)	4350-4460' KB 2 spf (2000 gals 15% HCL, Frac w/ 100,000# 20/40)		
Additional Perforations			
Perforations (MV)	None		

Version 1: Procedure subject to change based on changing well conditions.

Proposed Test Schedule:

Date	Event	Remarks
Monday, October 9, 2023	Check conditions, Perform MIT and Begin injection (72 hrs)	TD, Fill, Restrictions, begin injection at 10am
Thursday, October 12, 2023	End Injection and Begin FOT	Shut-In and monitor 10am
Saturday, October 21, 2023	216 hrs	Conclude test at 10am

Test Considerations:

V.1 The triplex pump at the facility is capable of maintaining a constant rate of **1600** bpd against the anticipated injection pressures.

V.2 The injection rate of **1600** bpd (46.7 gpm) will be sufficient to produce valid test data. (After the 2018 FOT, reservoir modeling was performed to minimize the fluid volume to pump. An extra 24 hrs of injection is being proposed as well as an additional 48 hours of falloff)

V.3 The normal waste liquid will be used during the FOT due to the cost effectiveness and availability.

V.4 The total volume of fluid needed for the FOT is **4800** bbls.

a) A total of 3600 bbls will be onsite prior to starting the injection for the FOT and water will continue to be hauled to facility in the case that more fluid is needed during the injection period.

b) City water will be purchased for the FOT if it becomes necessary to make up the volume required for the test.

V.5 The pressure acquisition will be performed with pressure gauges at the surface and the injection period will be a minimum of 72 hrs to ensure radial flow and stabilization. A total of 15 hrs was calculated using the EPA Region 6 UIC Pressure Falloff Testing Guideline design calculations found on pg A-4.

V.6 There will be adequate storage capacity for waste water for the duration of the FOT.

V.7 There is one offset well completed in the Point Lookout disposal formation. The McGrath #4 is a class II disposal operated by ConocoPhillips approx. 1.25 miles to the north west of the Sunco #1. The well has been P&A'd, so there will not be any injection activity from offset wells during the FOT.

V.8 Crown valve is currently in-place on the Sunco #1 wellhead. The slickline work will be performed through a lubricator prior to the injection period.

V.9 A shut-in valve is located on the injection riser approx. 3-feet from the wellhead. This valve can be shut quickly to reduce erratic pressure response and minimize the wellbore storage.

V.10 Prior to the FOT a gauge ring will be run through the tubing to ensure no restrictions in the tubing and slickline will also be used to tag up and determine wellbore fill. Test parameters will be adjusted accordingly or the needed the repairs will be made to remedy the situation.

V.11 Bottomhole pressure will not be collected directly but calculated from the surface pressure collected using the appropriate gradient. The use of surface pressure for the FOT is justified by the fact that the well will maintain a positive pressure at the surface during the entire test (injection and pressure falloff).

V.12 A test log will be kept during the test and submitted with the FOT results. The log will include key events with date and times.

- Gauge ring run
- Tag depth
- Injection start
- Injection stop
- Well isolation
- Pressure stabilization
- End of Fall Off

V.13 The continuous data recording consists of a WIKA CPG1500 Precision digital gauge. The gauge features a built in data logger capable of keeping 1 million measurements, 2,000-hour batter life, operating pressure range of 0-3,000 psig and an accuracy of +/- 0.1%. Data will be recorded every 15 seconds.

V.14 In addition surface pressures will be recorded continuously using a chart recorder during the FOT. If any abnormal surface pressure change occurs the test validity will be questioned and the test will be aborted if deemed invalid.

V.15 The tri-plex injection pump at the facility that is normally used for injection will be used for the FOT. It is a positive displacement pump running at a constant RPM which will ensure constant injection rate during the FOT. A constant injection rate of approximately 1600 bpd will be sufficient to create a minimum of 100 psi differential between final injection pressure and shut-in pressure. The rate will be carefully monitored prior to shut down to ensure a steady state injection is maintained prior to beginning the fall-off portion of the test.

Fall Off Test Procedure:

Prepare Well for Fall Off Test

1. Arrange for adequate injection fluid storage
2. Accumulate 3600 bbls of produced water
3. Perform MIT
4. MIRU slickline
5. RIH w/ Gauge ring to SN
6. POOH w/ Gauge ring and PU impression block (or something to run thru SN)
7. RIH tag and record fill depth
8. If no restrictions exist and fill is below the perfs continue on to FOT. Otherwise remediate problem or adjust FOT procedure before continuing. ***Note: (2018-9-12 Amendment- Tagged fill with wireline at 4387'. Contacted NMOCD Jim G. who then directed us to Will Jones. Will gave permission to conduct the FOT with the additional fill covering perfs.)***

Conduct Fall Off Test

9. Ensure surface gauges are configured properly
    a. Sufficient memory available
    b. Adequate power available
10. Begin injection, (66.7 bph) **1600** bwpd. Record time.
11. Inject for 72 hrs, total of **4800** bbls. Record start and stop time.
    a. Ensure injection pressures have stabilized before proceeding.
12. S/D injection pump and close valve @ wellhead. Record time.
    a. Once surface pressure stabilizes record start time of fall off.
13. Record pressure data for 216 hrs. Record start and stop time.
14. Put well back into service for normal operation.

Agua Moss, LLC

Wellbore Schematic

Sunco No. 1, SWD

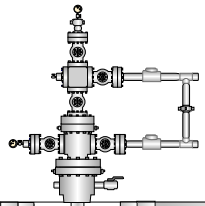
Current Wellbore Configuration

Location: 1595' fnl & 1005' 'fwl
Sec 2, T29N, R12W
San Juan Co, New Mexico

July 12th, 2013

Elevation: 5,859' GL
5,872' RKB

By: J. Ryan Davis



Top of Cmt @ Surface

Bit Size - 12 1/4"

8 5/8" 24# K55 Surface Csg @ 209' KB w/ 150sx; circ to surf

Tertiary

Cretaceous

DV tool @ 2244' KB.

Proposed: 2 7/8", 6.5#/ft EUE Internally Plastic Coated Tubing to 4250' KB w/ production packer @4250' KB
X Profile nipple, (2.25" ID).

Mesaverde - 4046'

Pt. Lookout Perfs:
4350' - 4460' 2 spf
(Acidized w/ 2000 gal 15% HCL on 9/1993 , Frac w/ 100,000# 20/40)

TD @ 4760'KB
PBTD @ 4706'KB

5.50" 15.5# K55 Csg @ 4750'
Stage 1: 230 sx
Stage 2: 515 sx
Circ 25 sx to surf

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District IV
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Phone:(505) 476-3470 Fax:(505) 476-3462

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Oil Conservation Division
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Santa Fe, NM 87505

COMMENTS

Action 245307

COMMENTS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 245307
	Action Type: [C-103] NOI Workover (C-103G)

COMMENTS

Created By	Comment	Comment Date
cchavez	Fall-Off Test (FOT) 2023	9/27/2023

District I
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	Action Type: [C-103] NOI Workover (C-103G)

CONDITIONS

Created By	Condition	Condition Date
cchavez	None	9/27/2023