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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD
SEP 22 2014

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

RECEIVED

1. Operator Name and Address	2. OGRID Number
Sundown Energy LP 13455 Noel Rd, Ste 2000 Dallas, TX75240	232611
	3. API Number 30-025-27586

4. Property Code	5. Property Name	6. Well No.
40359	BOBBI State WF Unit	4

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
L	20	18S	36E		1650	SOUTH	990	WEST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
ARKANSAS JUNTION; SAN ANDRES, WEST	2503

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
E	O	R	S	3835'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
NO	5600'	SAN ANDRES		10/1981

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
	11"	8-5/8"		1901'	700	circulated
	7-7/8"	4-1/2"		5600'	125	5100'

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure
MANUAL	3000	3000

E-PERMITTING - - New Well_____
Comp_____ P&A_____ TA_____
CSNG_____ Loc Chng_____
ReComp ENTRY Add New Well_____
Cancl Well_____ Create Pool_____

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Belinda Bradley

Printed name: BELINDA BRADLEY
Title: ADMIN. ASST.
E-mail Address: bbradley@sundownenergy.com
Date: 9/19/2014 Phone: 432-943-8770

OIL CONSERVATION DIVISION

Approved By:
Title: Petroleum Engineer
Approved Date: 09/26/14 Expiration Date: 09/26/16
Conditions of Approval Attached

R-13731

OCT 01 2014

RE-ENTRY PROCEDURE

Bobbi No. 4 (Bobbi State Waterflood Unit #4)

Re-enter and complete in Upper San Andres

API # 30-025-27586

Sec 20-18S- 36E – 1650' FSL & 990' FWL

1- Set anchors. Find well, re-weld surface pipe & production pipe back to surface. Transfer 2-3/8" 4.7# L-80 tbg for workstring. MIRU PU w/ reverse unit. RU BOP. RIH w/ 3-3/4" bit & 12 DCs.
2- Circulate hole clean with San Andres water. Drill out surface plug. Drill out waterboard plug 450'. Drill out plugs w/ sqz holes @ 1851'. Drill out plug @ 3186'. Tag CIBP @ 5234'. Drill out & clean out hole to 5450'. Do not drill CIBP w/ cmt @ 5450 – 5464'. Pressure test the csg & CIBP to 500 psig.
3- POOH w/ drlg assbly. MIRU WL unit. RIH w/ 3-3/8" csg guns & perf 5189 – 5194', 1 SPF, ttl 5 holes (1 zone).
4- RIH w/ treating pkr & set pkr @ 5150' to acdz new perfs and re-acidize existing perfs f/ 5286' – 5389' (3 zones). Acdz interval w/ 6000 gals 15 NeFe HCL w/ sludge control (acitol or equivalent). Drop 55 ball sealers to insure ball out.
5- Swab the entire section to get load back. Once oil is achieved or load water is recovered.
6- POH w/ 2-3/8" 4.7# L-80 workstring. PU & RIH w/ frac treating pkr (arrow-set or equalvalent).PU & RIH w/ 2-7/8" L-80 frac string w/ premium intergral jt threads. (String may have to be rented). Prep to frac all three intervals (if all three are productive)down tbg @ 23 – 25 bpm. Plan to frac stimulate w/ 120,000# 20-40 Brady sand w/ a standard conventional 25# x-linked Borate system. Frac job is same as the Bobbi #2, however, total sand had been increased. Note: These are four zones w/ 5 sets of holes in each zone. Balls may need to be dropped (8 balls)to ensure treatment of all zones. Plan to radioactive tag the frac stimulation.
7- POOH w/ frac string. RIH & clean out wellbore of frac sand. MIRU WL unit & run frac log to determine treatment. Drill out CIBP @ 5450' – 64'. RIH w/ IPC 2-3/8" J-55 tbg w/ Baker AD-1 compression set pkr @ +/-5160'.
8- Lay injection lines f/ the Bobbi#3 injection station to the subject well. Lay or bury lines as per the State Lands of NM. Prep to turn well to injection.

Ralph Butler P E
Area Production Manager

INJECTION WELL DATA SHEET

OPERATOR: Sundown Energy, LP

WELL NAME & NUMBER: Bobbi No. 4 **(API No. 30-025-27586)**

WELL LOCATION:	1650' FSL & 990' FWL	L	20	18 South	36 East
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

See Attached Wellbore Schematics

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8 5/8" @ 1,901'

Cemented with: 700 Sx. or _____ ft^3

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ or _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 4 ½" @ 5,600'

Cement with: 125 Sx. or _____ ft^3

Top of Cement: 5,100' Method Determined: Calculated

Total Depth: 5,600'

Injection Interval

Perforated Interval –5,286'-5,572'

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" 4.7# J-55 Lining Material: Internally Plastic Coated

Type of Packer: Baker AD-1 Injection Packer

Packer Setting Depth: 5,236' or within 100' of the uppermost injection perforations

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection: ____ Yes ____X____ No

   If no, for what purpose was the well originally drilled: Well was drilled in 1981 as a producing well in the San Andres formation. Well was plugged and abandoned in 2009.

2. Name of the Injection Formation: San Andres

3. Name of Field or Pool (if applicable): West Arkansas Junction-San Andres Pool (Oil-2503)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

   None

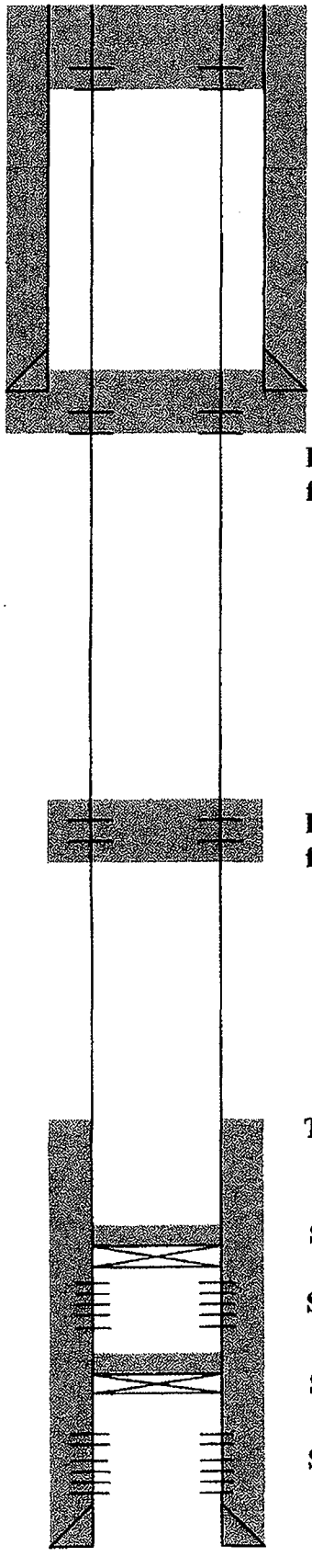
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

   Within the proposed waterflood project area in Sections 19, 20, 28 & 29, T-18S, R-36E: Arkansas Junction-Penn Pool (10,000'-11,000'); Arkansas Junction-Devonian Pool (12,000'-13,000')

Current Wellbore Configuration

Sundown Energy, LP
Bobbi No. 4
API No. 30-025-27586
1650' FSL & 990' FWL, Unit L
Section 20, T-18S, R-36E

Drilled: 10/1981
Plugged: 10/2009



Perforate 4 ½" csg. @ 400' & cement to surface w/110 sx.

11" Hole; Set 8 5/8" 24# csg. @ 1901'
Cemented w/700 sx.
Cement circulated to surface

Perforate 4 ½" csg. @ 1,951' & cement w/40 sx. from 1,755'-1,951 (Tagged)

Perforate 4 ½" csg @ 3,186 & cement w/40 sx. from 2,987'-3,186' (Tagged)

TOC @ 5,100' (Calc.)

Set CIBP @ 5,234' w/cement 5,200'-5,234'

San Andres Perforations: 5,286'-5,389'

Set CIBP @ 5,462' w/cement 5,450'-5,462'

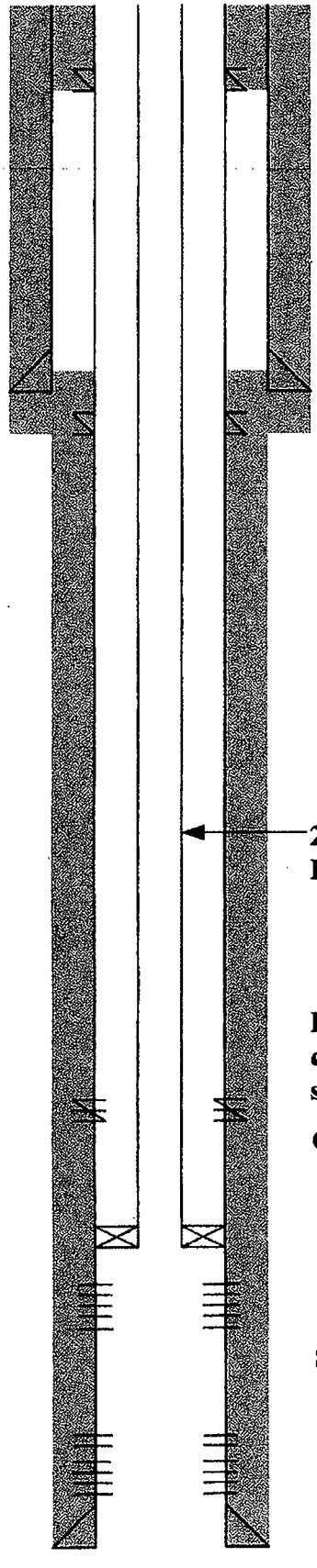
San Andres Perforations: 5,504'-5,572'

7 7/8" Hole; Set 4 ½" 10.5# csg. @ 5,600'
Cemented w/125 Sx.
Calculated TOC @ 5,100'

T.D. 5,600'

Proposed Wellbore Configuration

Sundown Energy, LP
Bobbi No. 4
API No. 30-025-27586
1650' FSL & 990' FWL, Unit L
Section 20, T-18S, R-36E



11" Hole; Set 8 5/8" 24# csg. @ 1901'
Cemented w/700 sx.
Cement circulated to surface

2 3/8" 4.7# IPC J-55 Tubing set in a
Baker Model AD-1 Packer @ 5,236'

Run CBL to determine TOC. Perforate 4 ½" csg. @ cement top and cement squeeze w/300 sx. 50/50 Poz "C"

Original TOC @ 5,100' (Calc.)

San Andres Injection Perforations: 5,286'-5,572'

7 7/8" Hole; Set 4 ½" 10.5# csg. @ 5,600'
Cemented w/125 Sx.
Calculated TOC @ 5,100'

T.D. 5,600'