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
AUG 21 2014
RECEIVED

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

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

1. Operator Name and Address	2. OGRID Number
LEGACY RESERVES OPERATING LP PO BOX 10848 MIDLAND, TX 79702	240974
	3. API Number 30-005-00943

4. Property Code	5. Property Name	6. Well No.
~~303739~~ 313287	Rock Queen Unit	#89

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	36	13-S	31-E		1980	South	660	East	Chaves

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	36	13-S	31-E		1980	South	660	East	Chaves

9. Pool Information

Pool Name	Pool Code
Caprock: Queen	8559

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
E	O	R	S	4382
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
No	3090	Queen	TBD	7/15/14

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
80-185	Approximately 1-1/2 miles in Section 35, T13-S, R31-E	Approximately ½ mile

x 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
Surface	12-1/4	8-5/8	24	305	200	Circ'd
Production	7-7/8	5-1/2	14	3073	100	2557'-calc'd

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double-ram	Minimum 3000 psi	1000 minimum	TBD

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: Laura Pina

Printed name: Laura Pina
Title: Regulatory Tech
E-mail Address: lpina@legacylp.com
Date: 08/19/14 Phone: 432-689-5200

OIL CONSERVATION DIVISION

Approved By:
Title: Petroleum Engineer
Approved Date: 08/27/14 Expiration Date: 08/27/16
Conditions of Approval Attached

AUG 27 2014

Well: RQU #89

Objective: Re-enter P&A well and return to production.

	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Volume (bbls/1000')
Casing					
5-1/2", 14ppf, J-55, surface-3073'	5.012	4.887	4270	3120	24.4
Workstring/Production Tubing					
2-7/8", 6.5 ppf, J-55, 8rd EUE, YB	2.441	2.347	7260	7680	5.8

NOTE: It is likely that this well will flow water during or after drilling the bottom plug.

1) Remove P&A marker and install 8-5/8"-by-5-1/2" SOW, 5-1/2" nipple, and 5-1/2" Larkin-type head. Top threads of nipple should be 1 to 1-1/2 feet above ground level.

2) MIRU doubles unit. NU minimum 3000 psi WP, hydraulically-actuated, double-ram BOP and test to 1000 psi.

3) Drill out surface plug with 4-3/4" mill-tooth bit and up to 6 DC's. At 385', pressure test casing to 500 psi before drilling out rest of surface plug to 442'.

4) POOH, change to a Henson insert bit, add 4 DC's, and drill out plug at 1314' to 1530', pressure test casing to 300 psi. Continue drilling out plug to 1560'.

5) Drill out plug at 1905' to 2210' and pressure test casing to 300 psi. Continue drilling out cement plugs to TD and circulate clean. PU one stand, wait 2 hours, then tag TD and circulate clean and POOH.

6) RBIH with bit, bit sub, one DC, 4-3/4" string mill, one DC, 4-3/4" string mill and 4 DC's. Clean out to TD at 3077, PU one stand, wait 2 hours, tag TD and circulate clean. Continue short-tripping and circulating bottoms up until hole is clean before POOH.

7) RIH w/RBP and treating packer, set RBP at 2700', and test to 1000 psi. Test casing COOH w/packer. Isolate any leaks with RBP and packer and EIR at less than 1000 psi. POOH w/tools.

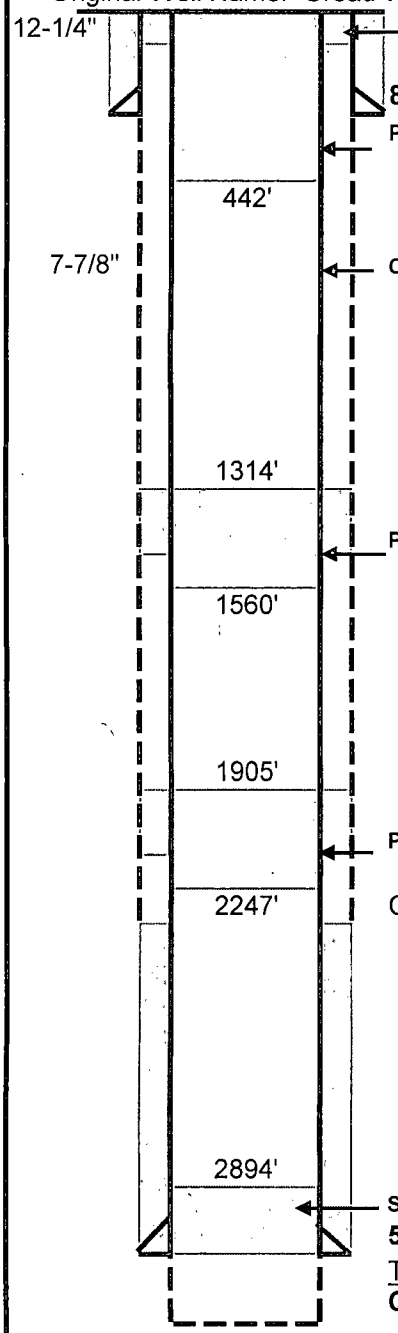
8) RBIH w/packer and acidize the OH interval w/500 gals 90/10 inhibited 7-1/2% NEFE/xylene at maximum rate without exceeding 4000 psi surface treating pressure. Test tubing GIH to 5000 psi. Flush/overflush acid/xylene w/40 bbls freshwater, record initial and 15-mins shut in pressure, flow down well and POOH

9) RIH w/ TAC and stator on 2-7/8" workstring and set. Run rotor and rods and install surface unit. Connect to flowline and put on production.

LEGACY RESERVES OPERATING LP

		DATE:	**10-Nov-12**
FIELD:	**Caprock**	**BY:**	**MWM**
LEASE/UNIT:	**Rock Queen**	**WELL:**	**89**
COUNTY:	**Chaves**	**STATE:**	**New Mexico**

Location: 1980' FSL & 660' FEL, Sec 36I, T13S, R31E — **KB = 4,391'**
SPUD: 03/56 COMP: 03/56 — **GL = 4,382'**
CURRENT STATUS: Producer — **API = 30-005-00943**
Original Well Name: Gread Western Drilling Co. State U #14



Pump 10 sx down 5-1/2"-by-8-5/8" annulus--pressure inc'g to 300 psi.

8-5/8" 24# @ 305' w/200 sx--circ'd

Perf @ 355'-could not circ 5-1/2"-by-8-5/8" ann at 350#; spotted 53 sx at 442'

Casing leak at 500'-555'(bled 540# to 480#, 5 mins)

T-Anhy @ 1410'
T-Salt @ 1500'
B-Salt @ 2180'
T-Yates @ 2290'
T-7Rvrs @ 2430'
T-Queen @ 3075'

Perf @ 1500' & spotted 25 sx @ 1314'-1560'(could not EIR at 1000#)

Perf @ 2180' & spotted 40 sx @ 1905'-2247'(could not EIR at 1300#)

Calc TOC @ 2557'; enlargement=10%, yield=1.26 ft3/sk

Spot 25 sx 3073'-2894'

5-1/2" 14# @ 3073' w/100 sx

Top of Queen @ 3075:

Queen Open Hole: 3075' - 3077' (03-56)