# UIC Program Brine Well EPA 5-Yr. MIT Guidance

(30-minute hydrostatic well casing MIT closed to formation)

- 1) A work over rig must remove all tubing from the hole.
- A packer or plug must be set within 20 feet of the casing shoe depth and piping must be filled, and pressured up from 300 to 500 psi. The casing/tubing annulus must be loaded with inert fluid at least 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Wellhead shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pumps, tanks, external lines etc. must be isolated from the wellhead during test.
- A continuous recording pressure device with a 1 or 4-hour clock shall be installed on the casing annulus. The pressure range shall not be greater than 500 psig. The operator must provide proof that the pressure-recording device has been calibrated within the past 6 months.
- 5) A minimum of one pressure gauge shall be installed on the casing/tubing annulus.
- OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator may be required to bleed-off well pressure to demonstrate recorder and gauge response into an adequately sized containment vessel(s) for this purpose and to verify that there were no obstructions in the well during the test. Effluent from this vessel must be discharged back into the well at the completion of the test.
- 7) The Operator shall supply the following information on the pressure chart:
  - A. Company Name, Well Name, API #, Legal Location.

- B. Test Procedure (1) Casing + Formation (2) Casing Test Only (3) Both (4) Other
- C. Testing Media: Water, Gas, Oil, Etc.
- D. Date, time started and ending.
- E. Name (printed) and signature of company representative and OCD Inspector
- 8) <u>TEST ACCEPTANCE:</u> The OCD will use the following criteria in determining if a well has passed the Mechanical Integrity Test:
  - A. <u>Passes</u> if Zero Bleed-Off during the test.
  - B. Passes if Final Test Pressure is within  $\pm 10\%$  of Starting Pressure, if approved by the OCD inspector.
  - C. <u>Fails</u> if any Final Test Pressure is greater than  $\pm$  10% of Starting Pressure. Operators must investigate for leaks and demonstrate that mechanical integrity of the well(s) by ensuring there are no leaks in the casing, or packer, and injected/produced fluids are confined within the piping and injection zones. Wells shall not resume operations until approved by OCD.

Note: OCD recognizes that different operations, well designs, formation characteristics and field conditions may cause variations in the above procedures. If operator wishes to make or anticipate changes, please notify the OCD for approval. All operators are responsible to notify OCD of any procedure that may cause harm to the well system or formation. Please be advised that OCD approval does not relieve any operator of liability should operations result in pollution of surface water, groundwater, or the environment.

Also note: This document is intended to provide technical guidance to operators on technical means to achieve compliance with the rules and regulations of the Oil Conservation Division and the Oil and Gas Act. The test procedures set forth are not regulations or policies and therefore other methods may exist to achieve compliance with the rules and regulations and the Oil and Gas Act.

NMOCD recommends that a licensed professional engineer or licensed geologist, or a licensed professional engineer or licensed geologist designee supervise all test procedures and associated field activity.



## **Perform Casing MIT Instead- CJC 2/14/22**

Attn. NMOCD

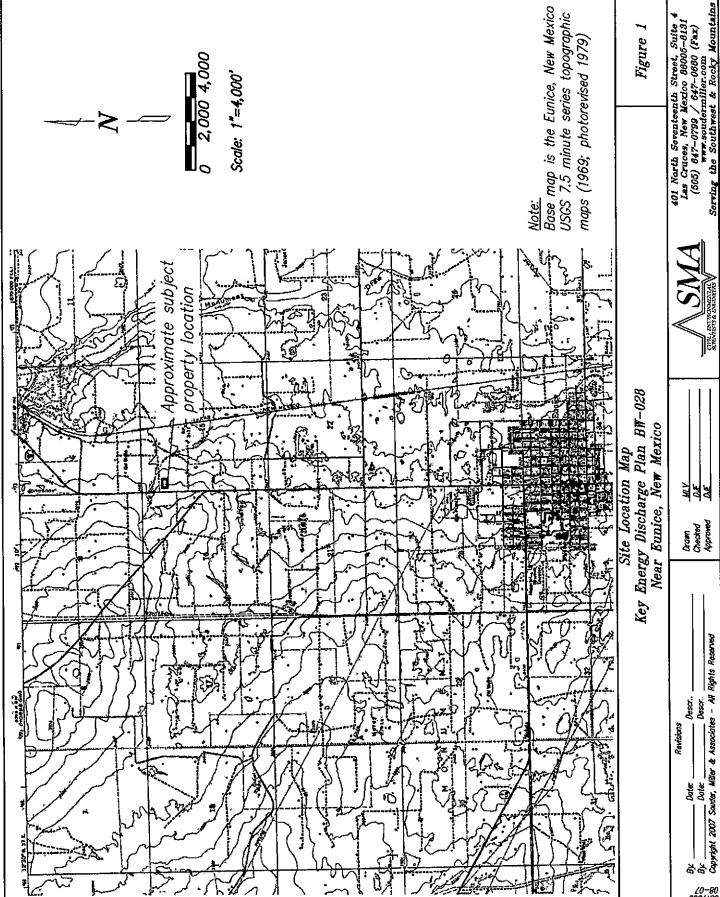
MIT Procedure State Brine Well #1 API # 30-025-33547 OGRID 19797 Lease # 28441 Facility ID fCJC2134938257 Permit BW-28

### Intentions:

To complete the MIT # 00000000 for the State S Brine well February 1, 2022. Fresh water will be injected down the tubing, while pressure is monitored on both the tubing and casing. Once the well is static at 220psi, a four-hour test will be recorded of the cavern and casing integrity. It is known and documented that the formation fractures at 240psi, and this needs to be avoided if possible.

### Thanks

Houston Hefley Asset Operations Manager 832-444-5273



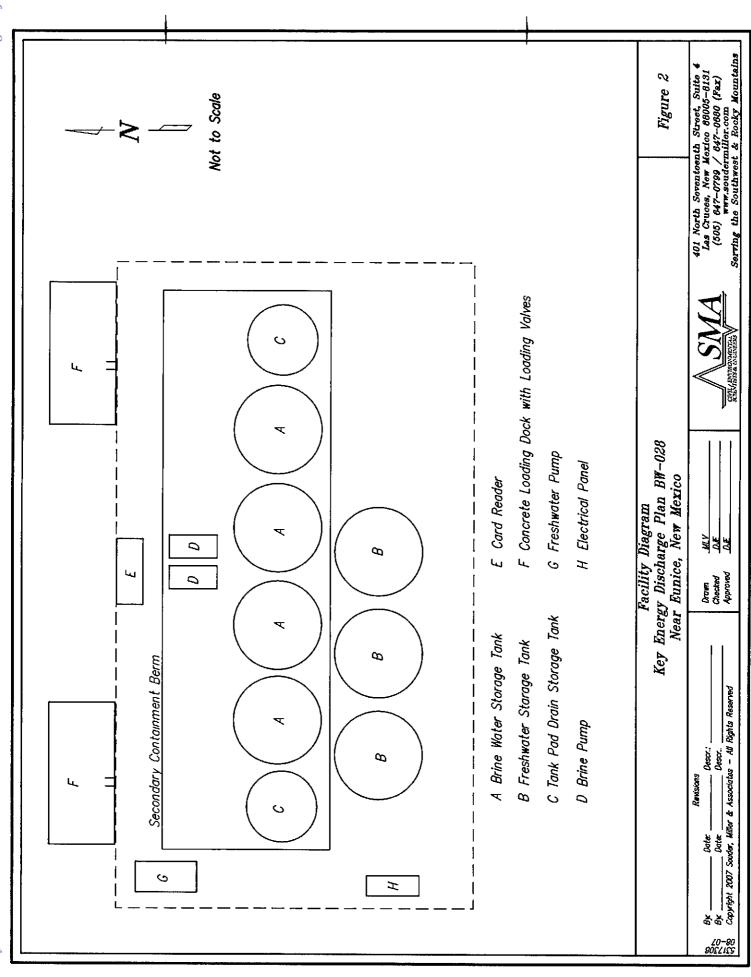
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By Date Descr.

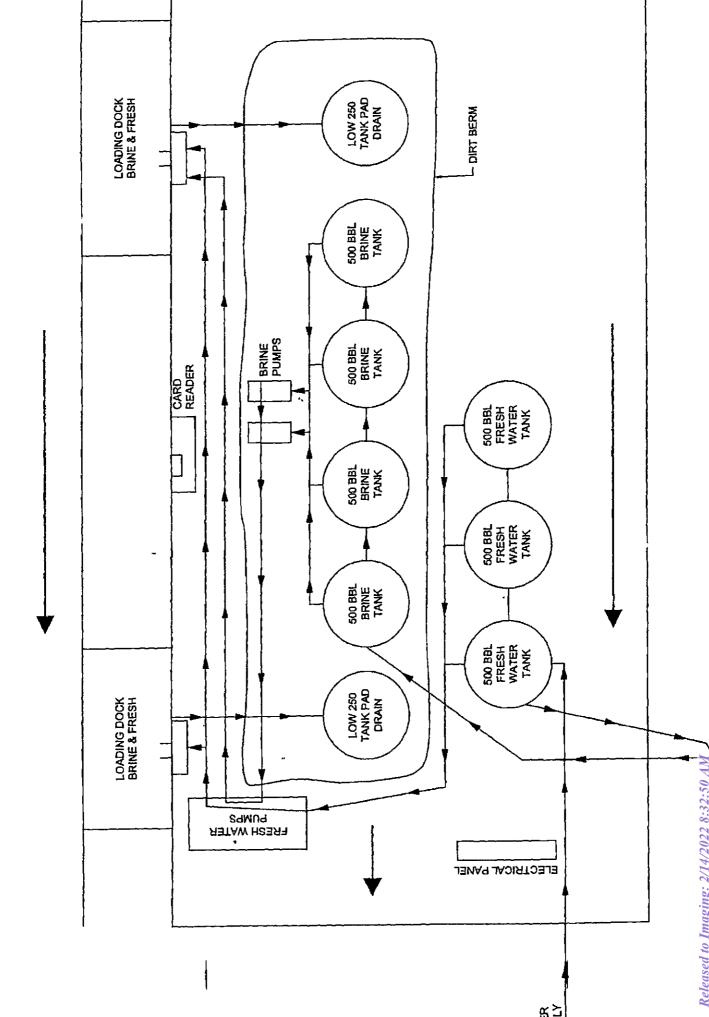
By Date Descr.

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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

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**

COMMENTS

Action 76056

### **COMMENTS**

| Operator:                | OGRID:                              |
|--------------------------|-------------------------------------|
| KEY ENERGY SERVICES, LLC | 19797                               |
| 1500 CityWest Boulevard  | Action Number:                      |
| Houston, TX 77042        | 76056                               |
|                          | Action Type:                        |
|                          | [C-103] NOI General Sundry (C-103X) |

### COMMENTS

| Created By |  | Comment<br>Date |
|------------|--|-----------------|
|            | OCD replaced original "Cavern MIT" with "Casing MIT" Procedure due to historical problems with performing Cavern MIT. Permittee shall conduct a Casing MIT and OCD Guidance has been added to the submittal on 2/14/22 by Carl Chavez (OCD). | 2/14/2022       |

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### CONDITIONS

| Created By | / Condition   | Condition<br>Date |
|------------|---|-------------------|
| cchavez    | 1) The Permittee shall perform a Casing MIT due to historical problems with Cavern MIT procedure. 2) Follow added OCD Casing MIT Guidance for MIT. 3) Contact Gary Robinson for MIT rescheduling to 2/15/2022 or agreed date and time for witnessing the MIT. | 2/14/2022         |