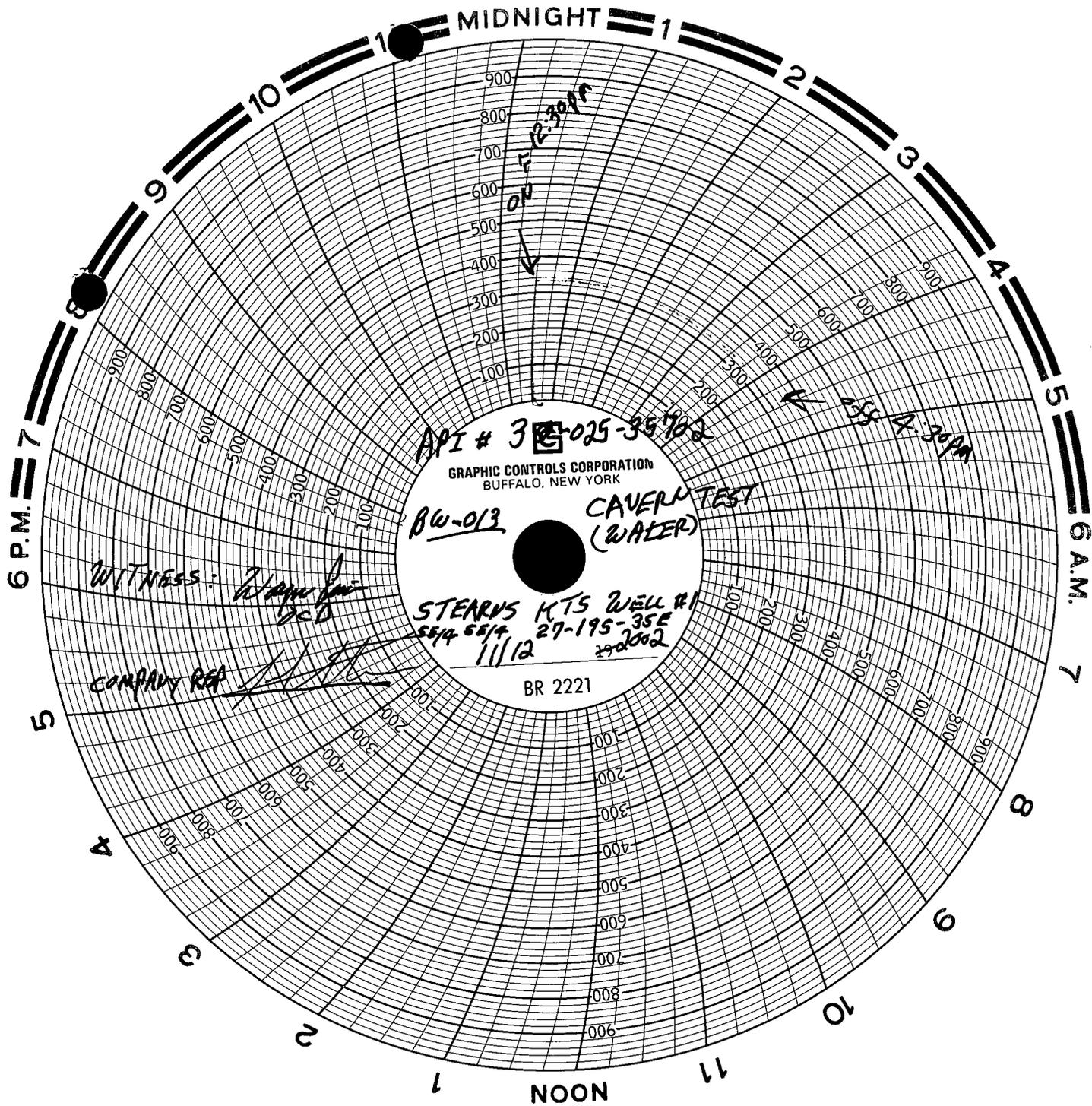


**BW - 13**

**MECHANICAL  
INTEGRITY TEST  
(MITs)**

**DATE: \_\_\_\_\_**



API # 30-025-35702

GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

BW-013

CAVERN TEST  
(WATER)

STEARNS KTS WELL #1  
55/4 65/4 27-195-35E  
11/12 27002

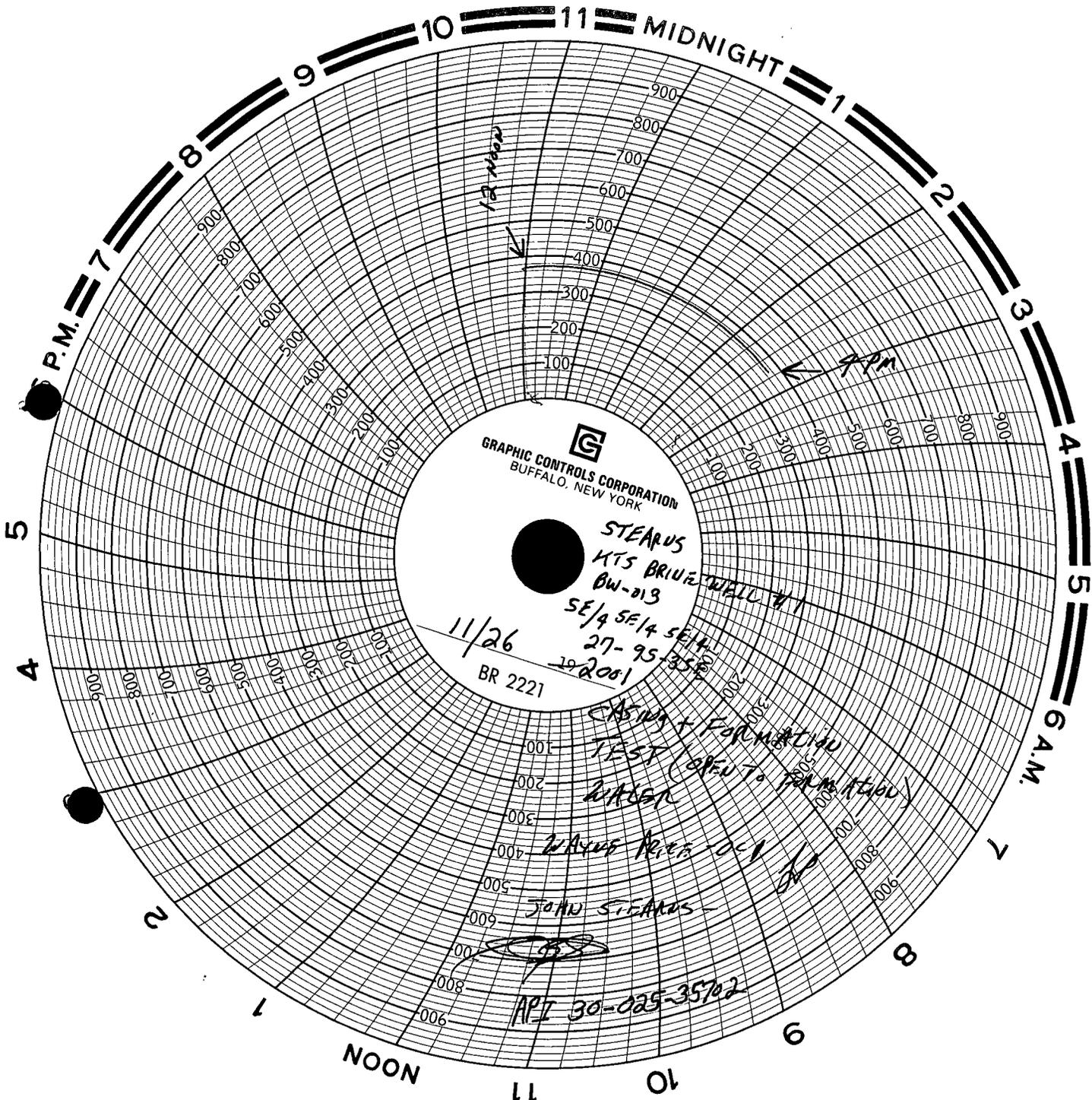
BR 2221

WITNESS: *[Signature]*  
JCD

COMPANY REP: *[Signature]*

OUT 12:30 PM  
↓

← 4:30 PM



**G**  
GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

STEARUS  
KTS BRINE WELL #1  
DW-013  
SE 1/4 SE 1/4  
27-95-35E  
11/26  
BR 2221

CASING + FORMATION  
TEST (OPEN TO FORMATION)  
WATER

WATER PRESS. DEC 1958  
JOHN STEARUS

~~1958~~  
API 30-025-35702

12 noon

4 PM



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

STEARNS - BW 013

October 20, 2001

CERTIFIED MAIL  
RETURN RECEIPT NO. 5357 7577

## Attention: Brine Well Operators

Re: Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity test:

1. At least once every five years isolate the cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing/tubing annuals.

Please find enclosed an "OCD Brine Well Test Schedule November 2001" and "Brine Well Test Procedure Guidance Document" for this November 26 through November 30, 2001. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the Type of Test you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

**What's New!! Please note that operators are required to have their pressure recording devices calibrated to 500 psig and 8-hour clock. See Guidance Document attached.**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
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STEARNS - BW 013

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**What's New!! Please note that operators are required to have their pressure recording devices calibrated to 500 psig and 8-hour clock. See Guidance Document attached.**

Brine Well Operators  
Oct 20, 2001  
Page 2

**What's New!! All operators will provide to the OCD the maximum test pressure that will not cause formation fracturing or system failures.**

Operators will be responsible for providing equipment and shall bear all costs incurred. All tests must be witnessed by the New Mexico Oil Conservation Division. Operators failing to abide by the procedures, type of test, and time schedules listed herein may be required to shut-in their systems until OCD has an opportunity to approve and witness testing.

If you require any further information or assistance please do not hesitate to write or call me at 505-476-3487 or E-mail WPRICE@state.nm.us.

Sincerely Yours,



Wayne Price- Senior Envr. Engr..  
Environnemental Bureau

cc: OCD District Offices

Attachments-    1.    OCD Brine Well Test Schedule November 2001  
                  2.    Brine Well Testing Procedure Guidance Document

## Brine Well Testing Procedure Guidance Document

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires a packer then casing/tubing annulus must be loaded with inert fluid 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.
  - 4) A continuous recording pressure device with an 8-hour clock (min) shall be installed on the casing/tubing 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. **Note: Wells with packer installed: If this test requires both the casing/tubing annulus and cavern to be tested then two recording devices must be supplied or one recording device with two pins.**
  - 5) A minimum of one pressure gauge shall be installed on the casing/tubing annulus.
  - 6) 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.
  - 7) The Operator will 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) **TEST ACCEPTANCE:** The OCD will use the following criteria in determining if a well has passed the Mechanical Integrity Test:
    - A. **Passes** if Zero Bleed-Off during the test.
    - B. **Passes** if Final Test Pressure is within  $\pm 1\%$  of Starting Pressure, if approved by the OCD inspector.
    - C. **Fails** if any Final Test Pressure is greater than  $\pm 1\%$  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 tubing, 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.

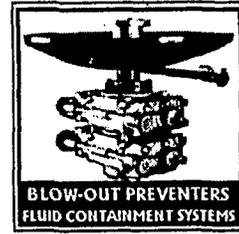
OCD BRINE WELL TESTING SCHEDULE 2001

Company	DP#	Facility Name	Date of Test	Start	Stop	Type of Test(s) Required	Contact Person	Telephone	FAX #/cell
Stearns Inc.	BW-013	Crossroads Area Crossroads	26-Nov-01	12 noon	4:00 PM	2 Pressure test cavern	L.A. Stearns	1-505-675-2356	1-505-675-2339
Marbob Brine Well Jims Water Ser.	BW-028 BW-005	Loco Hills Area M. Dodd "A" BW#1 SE of Artesia	27-Nov 27-Nov	9:00 AM 10:00 AM	1:00 PM 2:00 PM	2 Pressure test cavern * Pressure test cavern or casing * 1, 2 or 3	Doyle Davis Sammy Stoneman	748-5975 cell 1-505-748-1352	1-505-748-2523 1-505-748-3227
Key Energy Scurlock-Permian Zia Transportation Marathon Brine St	BW-018 BW-012 BW-018 BW-015	Hobbs Area Truckers #2 (Hobbs) Hobbs Station Sally Dog-Ark Jct Marathon Road	28-Nov-01 28-Nov-01 28-Nov-01 28-Nov-01	8:00 AM 9:00 AM 10:00 AM 11:30 AM	12 noon 1:00 PM 2:00 PM 3:30 PM	2 Pressure test cavern 2 Pressure test cavern 2 Pressure test cavern 1 Pressure Test Casing	Royce Crowell Richard Lentz Piter Bergstein CW Trainer	(505) 393-9171 505-392-8212 806-741-1080	505-910-4185 392-6988
P&S Brine Key Simms-McCasland Yale E. Key (Old Goldstar)	BW-002 BW-009A BW-028	Eunice Area Eunice Brine Station Eunice Brine Station Eunice Brine Station	29-Nov-01 29-Nov-01 29-Nov-01	8:00 AM 9:00 AM 10:00 AM	12 noon 1:00 PM 2:00 PM	2 Pressure test cavern 2 Pressure test cavern 2 Pressure test cavern	Dink Prather Royce Crowell Royce Crowell	505-394-2545 (505) 393-9171 1-505-394-2504	394-2426 505-910-4185 1-505-394-2560
I & W Key Energy-Carlsbad Scurlock/Permian	BW-06 BW-019 BW-027 & 27A	Carlsbad Area Carlsbad -Eugline Rowland Truckers Carlsbad Brine St.	30-Nov-01 30-Nov-01 30-Nov-01	8:00 AM 9:00 AM 10:00 AM	12 noon 1:00 PM 2:00 PM	2 Pressure test cavern 2 Pressure test cavern 2 Pressure test cavern	George Parchman John Hutcheson Richard Lentz	505-885-8663 1-505-885-2053 505-392-8212	885-8477 cell 390-1833 392-6988
Gandy Gandy Ray Westall	BW-04 BW-22 BW-21	Wells Already Tested In 2001 Wasserhund-Edison Tatum Brine St. Loco Hills Brine St.							
Chaparral SWD	BW-25	Wells Being Repaired- Salado Brine #2- Jal							
Notes:									
Type of Pressure Test:	1 Casing Test					Isolate cavern formation from the casing/tubing annulars and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes.			
	2 Open Hole Cavern Pressure Test					Open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annulars.			
	3 Others					Nitrogen-Brine Interface Test, Nitrogen Test, Etc.			



STEAMS

**D & L Meters & Instrument Service, Inc.**  
P.O. Box 1621  
Lovington, NM 88260  
(505) 396-3715 FAX (505) 396-5812



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Monday, December 04, 2000

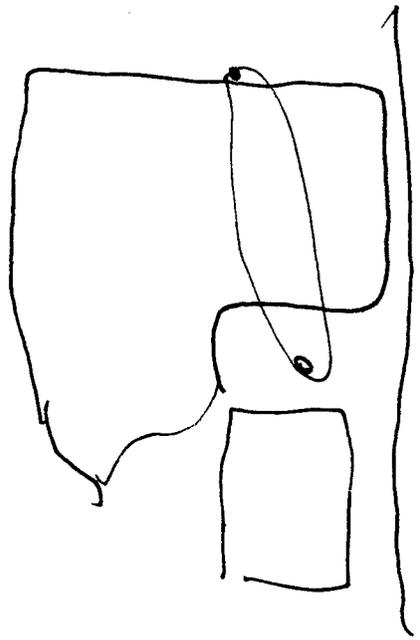
**Certification of Pressure Recorder Test:**

**Model: Bristols 8 " 1000#**

**Serial #:**

**This Pressure Recorder was tested at midrange for accuracy and verified within  
+5% and -5% for 1000# Pressure Element.**

  
Jesse Arenivas, Technician



JOHN GRAY



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

October 20, 2000

**CERTIFIED MAIL**

**RETURN RECEIPT NO.**

5051 4508

BW-013

CROSSROADS

**Attention: Brine Well Operators**

Re: Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity tests:

1. At least once every five years isolate the cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.

Please find enclosed an "OCD Brine Well Test Schedule December 2000" and "Brine Well Test Procedure Guidance Document" for this December 8<sup>th</sup> through 18<sup>th</sup> 2000. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the type of test you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

**Brine Well Operators**

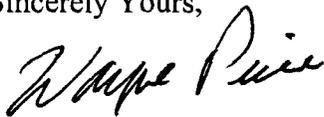
**10/20/00**

**Page 2**

Operators will be responsible for providing equipment and shall bear all costs incurred. All tests must be witnessed by the New Mexico Oil Conservation Division. Operators failing to abide by the procedures, type of test, and time schedules listed herein may be required to shut-in their systems until OCD has an opportunity to approve and witness testing.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,



Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

cc: OCD District Offices

- Attachments-
1. OCD Brine Well Test Schedule December 2000.
  2. Brine Well Testing Procedure Guidance Document.

OCD BRINE WELL TEST SCHEDULE December of 2000

Company	DP#	Facility Name	Date of Test	Start	Stop	Type of Test(s) Required	Contact Person	Telephone	FAX #
Marbob Brine Well	BW-029	M. Dodd "A" BW#1	December 08, 2000	1:00 PM	5:00 PM	2 Pressure test cavern	Doyle Davis Raye Miller	748-5975 cell 1-505-746-2523 748-3303	
P&S Brine	BW-002	Eunice Eunice Water ST.	December 11, 2000	8 am	12 noon	2 Pressure test cavern	Paul Prather	1-505-394-2545	1-505-394-2426
Simms-McCasland	BW-009A	Eunice Brine Station	December 11, 2000	9:30 am	1:30 pm	2 Pressure test cavern	Bob Patterson	1-505-394-2581	1-505-394-2584
Sally Dog, Inc.	BW-008	Arkansas-Jct	December 11, 2000	11 am	3 pm	2 Pressure test cavern	Mr. Piter Bergstein Walter Brisco	1-806-741-1080	
Stearns Inc.	BW-013	Crossroads	December 12, 2000	8:00 AM	12 noon	2 Pressure test cavern	L.A. Stearns	1-505-675-2356	1-505-675-2339
Gandy Corp.	BW-022	Tatum Water St.	December 12, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Larry Gandy	1-505-398-4960	cell 369-5721
Key Energy	BW-018	Truckers #2 (Hobbs)	December 12, 2000	10:30 AM	2:30 PM	2 Pressure test cavern	Pete Turner	1-505-397-4994	1-505-393-9023
I&W Trucking	BW-006 &6A	Carlsbad Yard	December 13, 2000	8:00 AM	12 noon	2 Pressure test cavern	George Parchman	1-505-885-6663	1-505-885-8477
Loco Hills Brine	BW-021	Loco Hills	December 13, 2000	1:30 PM	5:30 PM	2 Pressure test cavern	D. Maloney or R. Harris	1-505-677-2370	1-505-677-2361
Goldstar	BW-028	Eunice Brine Station	December 14, 2000	9:30 am	1:30 pm	2 Pressure test cavern	Royce Crowell	1-505-394-2504	1-505-394-2560
Quality Oil (Salado Brine Sales)	BW-025	Salado Brine St. #2	December 14, 2000	11am	3 pm	2 Pressure test cavern	see P&S		
Key Energy-Carlsbad	BW-019	Rowland Truckers	December 15, 2000	8:00 AM	12 noon	2 Pressure test cavern	John Hutcheson		1-505-887-3011
Scurlock/Parmian	BW-027 &27A	Carlsbad Brine St.	December 15, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Jim Ephraim	1-713-672-8092	1-713-672-7609
Jims Water Ser.	BW-005	SE of Artesia	December 15, 2000	10:30 AM	2:30 PM	2 Pressure test cavern	Sammy Stoneman	1-505-748-1352	1-505-746-3227
Scurlock-Parmian	BW-012	Hobbs Station	December 18, 2000	8:00 AM	12 noon	2 Pressure test cavern	Richard Lentz	1-505-392-8212	1-505-392-6988
Candy- WasserHaun	BW-004	Buckeye St.	December 18, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Larry Gandy	1-505-398-4960	cell 369-5721

Notes:

**Type of Pressure Test:** 1 Casing Test Isolate cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes.

2 Open Hole Cavern Pressure Test  
Open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids.

Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.

3 Others Nitrogen-Brine Interface Test, Nitrogen Test, Etc.

## Brine Well Testing Procedure Guidance Document

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires or utilizes a packer then the casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Well head shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pressure devices i.e pumps, truck pumps, etc. must be isolated from the well head during test.
- 4) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus, as directed by the OCD, with a pressure range of not greater than 500 psig. The operator must provide proof that pressure recording device has a range of 0-500 psig and has been calibrated within the past 6 months. Wells, with isolation packers installed, which requires both the casing/tubing annulus and cavern to be tested will require two recording devices or one recording device with two pins. Operators may utilize other types of pressure recording devices, such as electronic data loggers, etc., if approved by OCD.
- 5) A minimum of one pressure gage shall be installed in the system as directed by OCD.
- 6) 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 pressure to demonstrate recorder response.
- 7) **The Operator will supply the following information on the pressure chart before starting test:**
  1. Company name, discharge plan #, well name and number, legal location UL, section, township, range and county.
  2. Type of Test: Open Hole, Casing Test, or Both.
  3. Date, time test started, time stop.
  4. Chart and Recorder information. (can be attached)
  5. Normal operating surface and formation fracture pressure. (can be attached)
  6. **After Test Completed:**  
Name (printed) and signature of company representative and OCD inspector.

**Note: NMOCD recognizes that different operations, well constructions, well designs and field conditions may cause variations in the above procedures. Operator is responsible to notify OCD of any procedure that may cause harm to the well or formation. If operator wishes to make or anticipate changes you must notify the OCD for approval.**







NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

Fax: 1-505-675-2339

October 19, 1999

Mrs. L.A. Stearns  
Kenneth Tank Services  
P.O. Box 100  
Crossroads, New Mexico 88114

**Re: Mechanical Integrity Testing of Brine Supply Wells.**

This is a reminder that New Mexico Oil Conservation Division (NMOCD) will be witnessing mechanical integrity test for all brine supply wells during the time period between October 25 through November 2, 1999. A schedule was sent to each operator on September 11, 1999.

Please have your well ready for testing on the date and time you are scheduled. If there is some emergency which interferes with the scheduled date and time please call and notify NMOCD.

**Failure to notify NMOCD may result in your operations being suspended until testing is complete.**

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155) or notify Mr. Roger Anderson at (505-827-7152).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.  
Environmental Bureau



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

September 11, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z 357 870 162**

**Mrs. L.A. Stearns**  
**Kenneth Tank Services**  
**P.O. Box 100**  
**Crossroads, New Mexico 88114**

Re: Mechanical Integrity Testing of Brine Supply Wells

Dear Mrs. L.A. Stearns:

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity test:

1. At least once every five years isolate the cavern formation from the casing/tubing annuals and pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
2. Annually perform an open hole cavern formation pressure test by pressuring up the formation one and one-half times the normal operating pressure (not to exceed formation fracture pressure) or 300 psig whichever is greater for four hours. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.

**Please find enclosed an OCD Brine Well Test Schedule and Test Procedure for this Fall October 25, 1999 through November 2, 1999. Please have your well ready for testing on the date and time you are schedule.** Operators will be responsible for providing equipment and shall bear all costs incurred. All test must be witnessed by the New Mexico Oil Conservation Division.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

cc: OCD District Offices  
attachments- OCD Brine Well Test Schedule & Brine Well Testing Procedure Guidance Document

Company	DP#	Facility Name	Date of Test	Start	Stop	Type of Test(s) Required
P&S Brine	** BW-002	Eunice Eunice Water St.	October 25 1999	8 am	12 noon	Isolate cavern & pressure test casing + Cavern survey***
Simmis-McCasland	** BW-009A	Eunice Brine Station	October 25 1999	9:30 am	1:30 pm	Isolate cavern & pressure test casing + Cavern survey***
Goldstar	BW-028	Eunice Brine Station	October 25 1999	11 am	3 pm	Pressure test cavern
Key Energy	** BW-018	Rowland Truckers #2	October 26 1999	8 am	12 noon	Pressure test cavern + Cavern survey***
Scurlock-Permian	** BW-012	Hobbs Station	October 26 1999	9:30 am	1:30 pm	Isolate cavern & pressure test casing + Cavern survey***
Sally Dog, Inc.	** BW-008	Arkansas-Jct	October 26 1999	11 am	3 pm	Pressure test cavern + Cavern survey***
Quality Oil (Salado Brine Sales)	** BW-025	Salado Brine St. #2	October 27 1999	8 am	12 noon	Isolate cavern & pressure test casing + Cavern survey***
Conoco	** BW-001	Warren -Mckee #3	October 27 1999	1:30 pm	5:30 pm	Isolate cavern & pressure test casing
Conoco	** BW-001	Warren -Mckee #4	October 27 1999	1:30 pm	5:30 pm	Isolate cavern & pressure test casing
Quality Brine	BW-022	Tatum Water St.	October 28 1999	9 am	1 pm	Pressure test cavern
Kenneth Tank Service	BW-013	Crossroads	October 28 1999	11 am	3 pm	Pressure test cavern
WasserHaun	BW-004	Buckeye	October 29 1999	9 am	1 pm	Pressure test cavern
Marathon Brine St.	BW-015	Marathon Road	October 29 1999	11 am	3 pm	Pressure test cavern
Loco Hills Brine	BW-021	Loco Hills	November 1 1999	9 am	1 pm	Pressure test cavern
Jim's Water Ser.	BW-005	SE of Artesia	November 1 1999	11 am	3 pm	Pressure test cavern
B&W Trucking	BW-006 &6A	Carlsbad Yard	November 2 1999	8 am	12 noon	Pressure test cavern
Key Energy-Carlsbad	BW-019	Rowland Truckers	November 2 1999	9:30 am	1:30 pm	Pressure test cavern
Scurlock/Permian	** BW-027 &27A	Carlsbad Brine St.	November 2 1999	11 am	3 pm	Isolate cavern & pressure test casing + Cavern survey***
Notes:						
** Discharge Plan up for renewal						
** Cavern Surveys are Discharge Plan Requirements Companies have the option to perform now						
** are at a later date approved by OCD.						

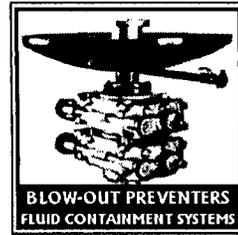


## Brine Well Testing Procedure Guidance Document

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires a packer then casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Well head shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pressure devices i.e pumps, truck pumps, etc. must be isolated from the well head before and during test.
- 4) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psig. The operator must provide proof that the recording device has been calibrated within the past 6 months. **Note: Wells with packer installed: If this test requires both the casing/tubing annulus and cavern to be tested then two recording devices must be supplied or one recording device with two pins.**
- 5) A minimum of one pressure gage shall be installed in the system.
- 6) OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator shall bleed-off pressure by 10% to demonstrate recorder response.
- 7) The following information shall be place on the chart:
  1. Date, time test started, time stop.
  2. Company name, Discharge Plan #, well name and number, legal location UL, section, township, range and county.
  3. Type of Test; Open hole, Casing Test, or Both.
  4. Printed name and signature of company representative and OCD representative.

**Note: NMOCDD recognizes that different operations, well constructions and field conditions may cause variations in the above procedures. If operator wishes to make or anticipate changes please notify the OCD for approval.**

**D & L Meters & Instrument Service, Inc.**  
P.O. Box 1621  
Lovington, NM 88260  
(505) 396-3715 FAX (505) 396-5812



---

Tuesday, October 30, 2001

**Certification of Pressure Recorder Test:**

**Model: BRISTOLS 8" 1000#**

**This Pressure Recorder was tested at midrange for accuracy and verified within  
+5% and -5% for 1000# pressure element.**

  
\_\_\_\_\_  
Jesse Arenivas, Technician

FORM 123

SERVICE ORDER

BLOW-OUT PREVENTERS  
FLUID CONTAINMENT SYSTEMS  
SAFETY VALVES • FISHING TOOLS • METER REPAIR  
SLIP TYPE ELEVATORS • PUMP AND VALVE REPAIR

D & L Meters & Instruments Services, Inc.  
PO Box 1621 • 710 South Commercial Street • Lovington, NM 88260  
(505) 396-3715 • FAX (505) 396-5812

10-27-99

DATE

Stearns Inc.

COMPANY

JESSE ARENIVAS, Operations Supervisor  
RES: (505) 396-2438

Cellular  
369-5253

PO #

John B. Stearns

BROUGHT IN BY:

TICKET #

DESCRIPTION OF ITEM

1000 # Pressure recorder

EXCHANGE?

YES

IN

OUT

NO

X

QUAN.	PART # AND DESCRIPTION	UNIT COST	TOTAL COST
1	Test verification on 1000# Pressure recorder.		
	Tested at midrange (550 psi) for an accuracy of +/- 5%		
	Test and calibrated by		
	<i>Jesse Arenivas</i>		

TOTAL PARTS

TOTAL LABOR

SUB TOTAL

6.125% GROSS RECEIPTS TAX




Submit 3 Copies To Appropriate District Office  
 District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W. Grand Ave., Artesia, NM 88210  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 May 27, 2004

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

WELL API NO. 30-025-35702

5. Indicate Type of Lease  
 STATE  FEE

6. State Oil & Gas Lease No. BW-013

7. Lease Name or Unit Agreement Name  
BW-013 KTS Brine Well

8. Well Number #1

9. OGRID Number  
21566

10. Pool name or Wildcat  
N/A

*Already Permitted Per No 2 Well file*

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.)

1. Type of Well: Oil Well  Gas Well  Other  Brine Well

2. Name of Operator  
John R. Stearns dba Stearns

3. Address of Operator  
HC 65 Box 988, Crossroads, N.M. 88114

4. Well Location  
 Unit Letter \_\_\_\_\_ : SE 1/4 feet from the SE 1/4 line and \_\_\_\_\_ feet from the \_\_\_\_\_ line  
 Section 27 Township 9S Range 35E NMPM Lea County

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

Pit or Below-grade Tank Application  or Closure   
 Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_  
 Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

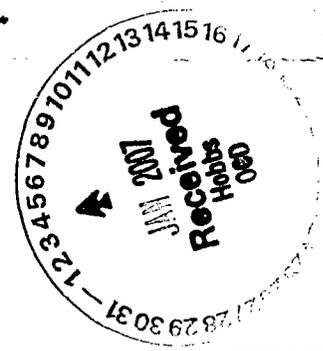
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <u>MIT</u> <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

*Visited on the phone with Gary Wink & Maxi Brown and ran MIT for 4 1/2 hrs @ 320 #. Working pressure on well is 250-260 #.*

*Chart Attached*



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit  or an (attached) alternative OCD-approved plan .

SIGNATURE [Signature] TITLE owner DATE 12/29/06

Type or print name For State Use Only E-mail address: Telephone No.

APPROVED BY: Larry W. Wink TITLE OG FIELD REPRESENTATIVE II / STAFF MANAGER DATE 1/4/07  
 Conditions of Approval (if any):



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

November 24, 1997

Mrs. L. A. Stearns  
Kenneth Tank Services  
P.O. Box 100  
Crossroads, New Mexico 88114

RE: Mechanical Integrity Testing of Brine Supply Wells

Dear Ms.L. A. Stearns:

Enclosed is a copy of the mechanical integrity test conducted on your brine well. Please retain this copy for your records.

As a condition of discharge plan approval, all brine facilities are required to submit a quarterly report listing, by month, the volumes of fluids injected and produced. The reports received by the New Mexico Oil Conservation Division (OCD) have not been by month. Please corrected the next quarterly report to reflect monthly figures.

On behalf of the OCD, I would like to thank you for your time and cooperation during the testing. If you have any questions, please contact me at (505) 827-7155.

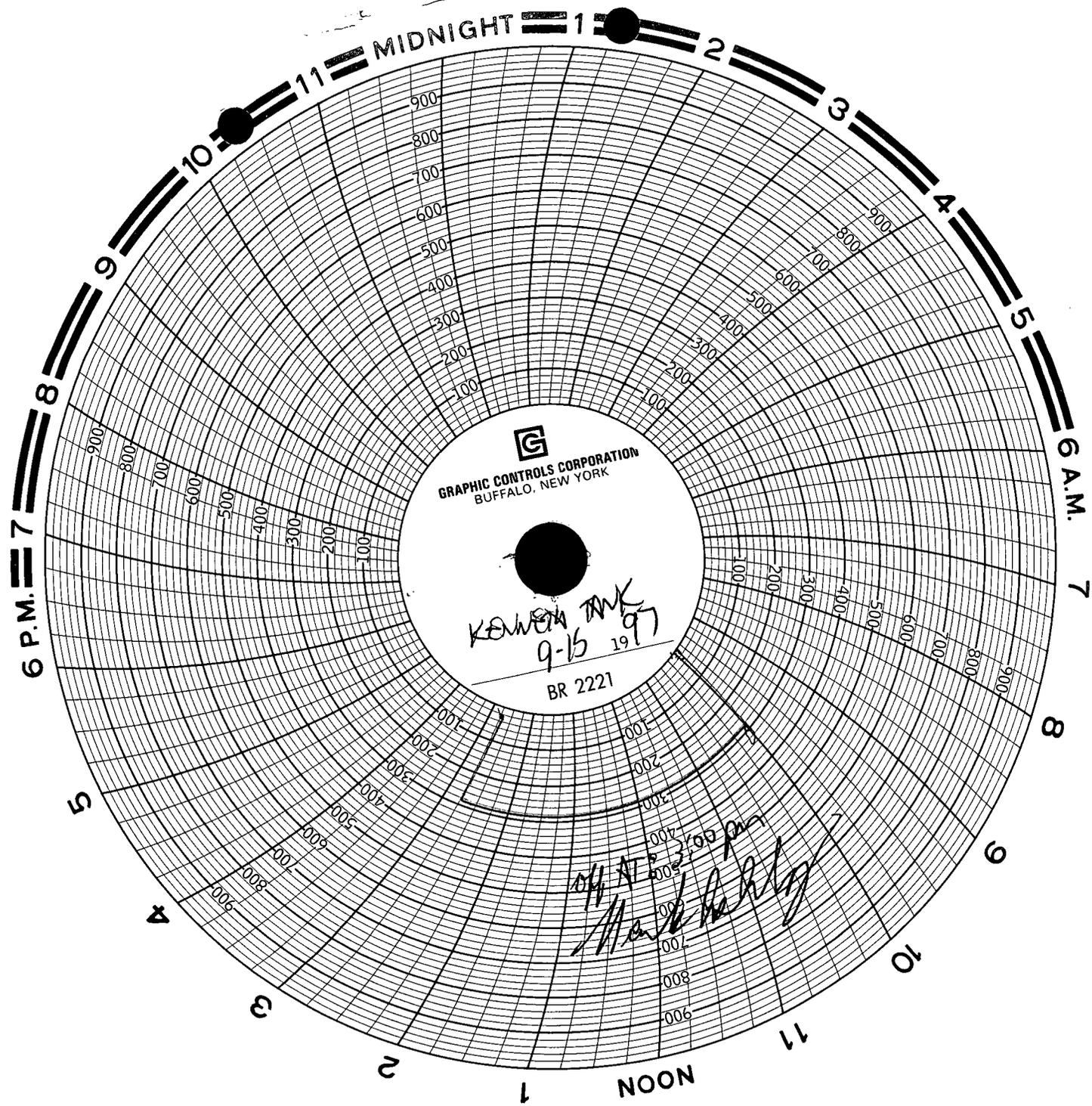
Sincerely,

A handwritten signature in cursive script that reads "Mark Ashley".

Mark Ashley  
Geologist

Attachment





  
GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

KENNY TANK  
9-15 1977

BR 2221

11:45 am  
Mark Kelly



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

August 12, 1997

**Certified Mail**  
**Return Receipt No. P-288-258-945**

Mrs. L.A. Stearns  
Kenneth Tank Services  
P.O. Box 100  
Crossroads, NM 88114

**RE: Mechanical Integrity Testing of Brine Supply Wells  
Annual Test  
Kenneth Tank Services Brine Production Facility BW-013  
Lea County, New Mexico**

Dear Mrs. Stearns:

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring that there are no leaks in the tubing, casing, or packer, and that the injected fluid is confined within the injection zone through proper cementing.

All brine wells that operate without a packer will be required to have an annual open hole pressure test equal to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for four hours with a maximum of 10 percent bleed-off allowed. Every five years or at the time of discharge plan renewals they will be required to have an open hole pressure test equal to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for four hours with zero bleed-off.

All brine wells that operate with a packer will be required to have an annual casing/tubing annulus pressure test equal to 300 psi for 30 minutes.

Operators will be responsible for providing equipment and shall bear all costs incurred. The date and time of all tests will be scheduled and witnessed by the New Mexico Oil Conservation Division.

Please have your well ready for testing on September 15, 1997 at 10:30 AM as outlined below.

For brine wells operating without a packer:

- 1) The cavern must be pressured up and stabilized for a period of at least 24 hours prior to testing.

Mrs. L. A. Stearns  
 August 12, 1997  
 Page 2

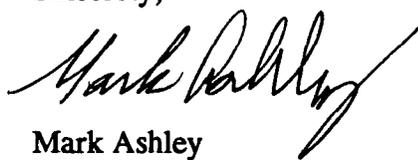
- 2) The system shall be tested to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for a period of four hours. A maximum of 10 percent bleed-off will be allowed for annual tests. Testing conducted every five years or at the time of discharge plan renewal will have zero bleed-off.
- 3) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psi.
- 4) Have well head prepared for test. All valves should be in good working order.
- 5) All gauges shall be in good working order.
- 6) Have manpower and equipment available for pressure test.

For brine wells operating with a packer:

- 1) Have the casing/tubing annulus and tubing loaded with inert fluid prior to testing.
- 2) The casing/tubing annulus shall be tested to 300 psi for 30 minutes.
- 3) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psi.
- 4) Have well head prepared for test. All valves should be in good working order.
- 5) All gauges shall be in good working order.
- 6) Have manpower and equipment available for pressure test.

If you have any questions regarding this matter, please feel free to contact me at (505) 827-7155.

Sincerely,



Mark Ashley  
 Geologist

PS Form **3800**, April 1995

US Postal Service <b>Receipt for Certified Mail</b> No Insurance Coverage Provided. Do not use for International Mail (See reverse)	
Street & Number	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

P 288 258 945

**NEW MEXICO OIL CONSERVATION DIVISION  
MECHANICAL INTEGRITY TEST**

OPERATOR: <u>KENNETH <del>TRUK</del></u>		WELL NO: <u>1</u>	
LEASE NAME: _____		RANGE: <u>25E</u>	
UNIT LETTER: <u>P</u>	SECTION: <u>27</u>	TOWNSHIP: <u>9S</u>	
FOOTAGE N/S: <u>2005</u>	FOOTAGE E/W: <u>200E</u>		
DP NO: <u>DW-23</u>	EXPIRES: <u>7-15-00</u>		
CASING:	SIZE	SET AT	TOP CMT
SURFACE:	<u>7'</u>	<u>2000'</u>	<u>&lt;</u>
INTERM:			
PROD:			
LINER:			
TUBING:	<u>2 1/2"</u>	<u>~2800'</u>	

TEST DATE: <u>10-11</u>	TYPE: <u>5 YR PRESSURE TEST</u>	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: <u>MA</u>	
REMARKS: <u>SAME @ 8:10 AM</u>		
REPAIRS: _____		
MODIFY: _____		

TEST DATE: _____	TYPE: _____	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: _____	
REMARKS: _____		
REPAIRS: _____		
MODIFY: _____		

TEST DATE: _____	TYPE: _____	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: _____	
REMARKS: _____		
REPAIRS: _____		
MODIFY: _____		

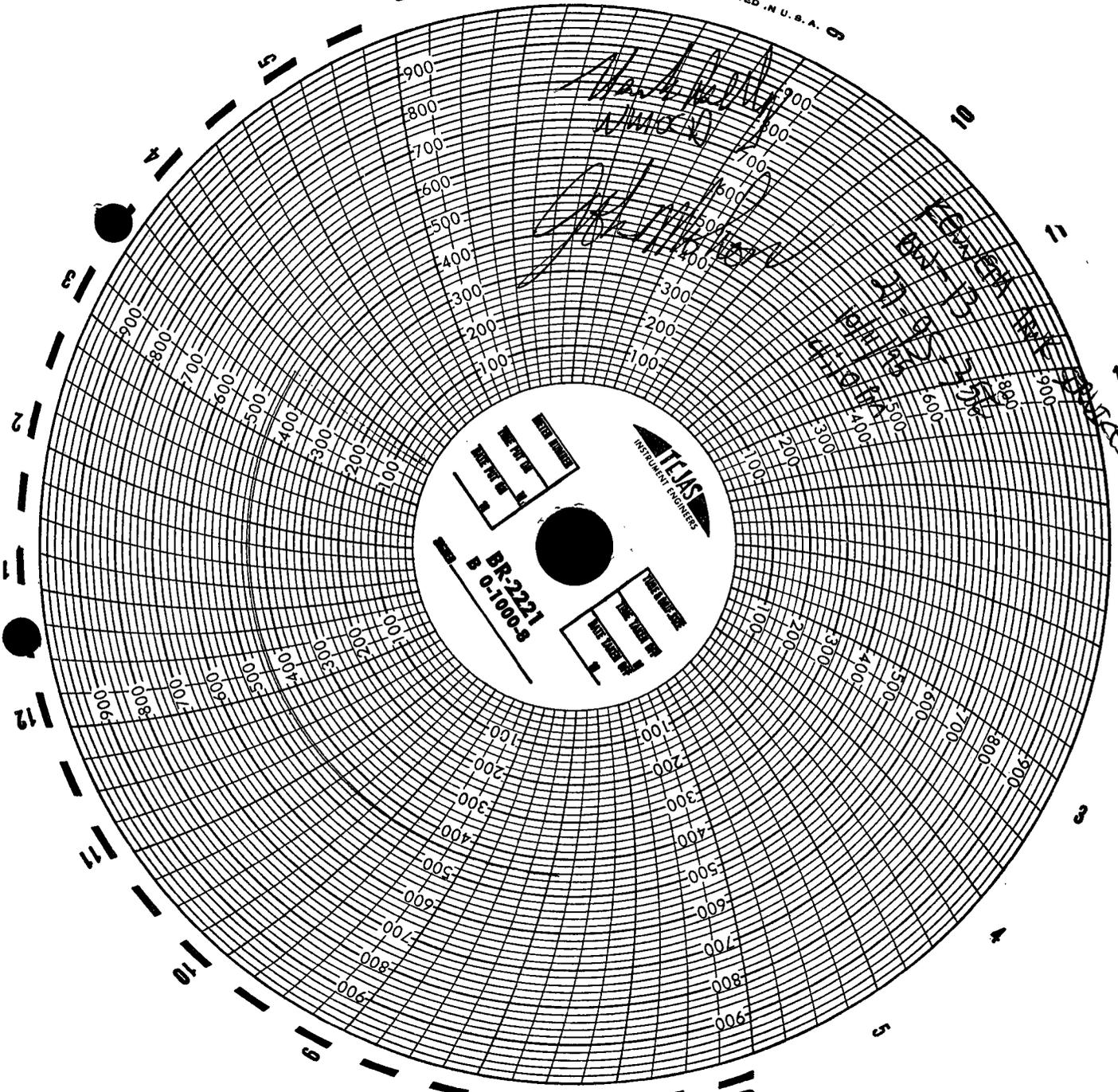
TEST DATE: _____	TYPE: _____	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: _____	
REMARKS: _____		
REPAIRS: _____		
MODIFY: _____		

TEST DATE: _____	TYPE: _____	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: _____	
REMARKS: _____		
REPAIRS: _____		
MODIFY: _____		

TEST DATE: _____	TYPE: _____	PASS/FAIL: _____
OPERATOR REP: _____	OCD REP: _____	
REMARKS: _____		
REPAIRS: _____		
MODIFY: _____		

6 DAY → 7

PRINTED IN U.S.A.



**OIL CONSERVATION DIVISION**

Z 765 962 777

October 13, 1995



**Receipt for Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-777**

Mrs. L.A. Stearns  
Kenneth Tank Services  
P.O. Box 100  
Crossroads, NM 88114

**Re: Discharge Plan BW-013  
Kenneth Tank Services Brine Production Facility  
Mechanical Integrity Test  
Lea County, New Mexico**

Sent to	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, March 1993

Dear Mrs. Stearns:

The New Mexico Oil Conservation Division would like to thank you for your cooperation during the October 11, 1995 Mechanical Integrity Test of the Kenneth Tank Services brine well. Enclosed is a copy of the chart for your records.

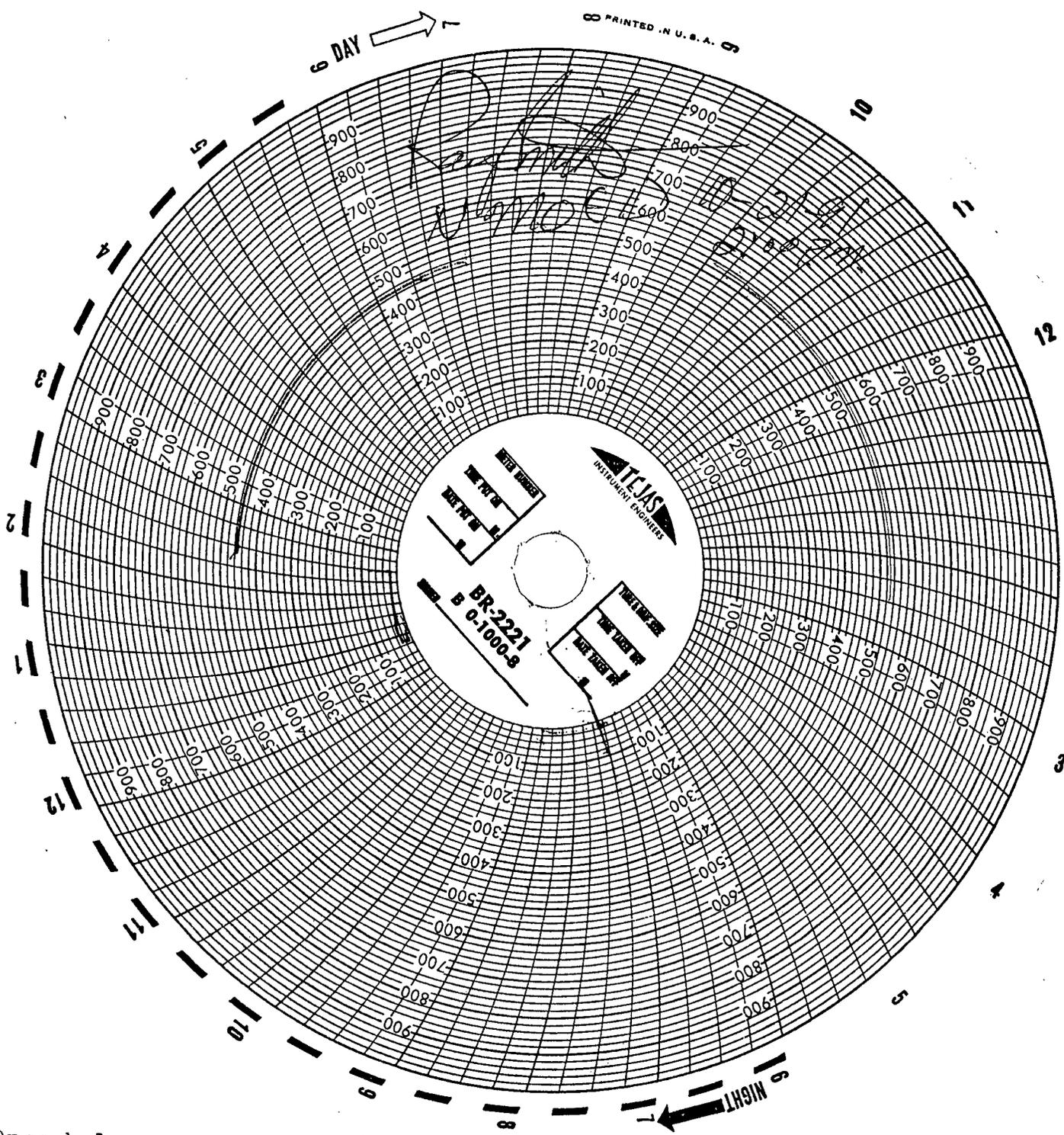
Should you have any further questions regarding your facility, please call me at (505) 827-7155.

Sincerely,

Mark Ashley  
Geologist

Attachments

xc: OCD Hobbs Office



Open hole pressure test on  
 Kenneth Tank Service/Brine Water Facility  
 Conducted by KTS and witnessed by OCD/Hobbs office 10/21/91.

KENNETH TANK SERVICE  
 BOX 100  
 CROSSROADS, N.M. 88114



MEMORANDUM OF MEETING OR CONVERSATION

<input type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time	Date
			October 9, 1991

<u>Originating Party</u>	<u>Other Parties</u>
K. M. Brown - OCD	Low Ann Stearns KTS Contact

Subject MIT Open hole test. Promised on Aug. 9, 1991 to conduct this within 2-3 weeks.  
No record was conducted.

Discussion Stated their kill truck had been out-of-service. Back in service now, but said her husband told her they couldn't run this test because it would start to make noise before 500psi. Explained the whole process to her and she seemed to basically understand the process.  
She said she'd set up the MIT with the Hobbs Office this afternoon and send a copy of the chart.

Conclusions or Agreements  
Need to check back in ~10 days (Oct. 18<sup>th</sup>) and make sure the test was conducted.

Distribution

Signed: *Kathy Brown*