

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised March 25, 1999

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

WELL API NO.

30-025-13228

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

NA

7. Lease Name or Unit Agreement Name:

LPG Storage

8. Well No.

1

9. Pool name or Wildcat

MA

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 LPG Storage

2. Name of Operator

Dynergy Midstream Services, Limited Partnership

3. Address of Operator

8201 South Highway 322, Monument, New Mexico

4. Well Location

88265

Unit Letter D : 100 feet from the North line and 100 feet from the West lineSection 1Township 20 S Range 36 E NMPMCounty Lea

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

BHF

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐ CHANGE PLANS ☐PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐CASING TEST AND CEMENT JOB ☐OTHER: ☐

12. 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.

Rig up workover rig, pull 4 1/2", 11.35#, N-80 tubing out of well. Run a density log, run a sonar log, then a Gyro Deviation Survey, next a Cement Bond Log, then a Multi-fingered Caliper log, and last a Digital Vertilog. Run new 4 1/2", 11.35#, N-80 tubing back in, while torque-turning, & pressure testing each connection. Pressure test wellhead & p-seal, if o.k. rig down workover rig. Perform Nitrogen/Brine Mechanical Integrity Pressure Test, to insure cavern integrity.

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

SIGNATURE Larry W. Malloy TITLE Regional Well Specialist DATE 7/31/00Type or print name Larry W. Malloy
(This space for State use)Telephone No 281-385-3115

APPROVED BY

ORIGINAL SIGNATURE

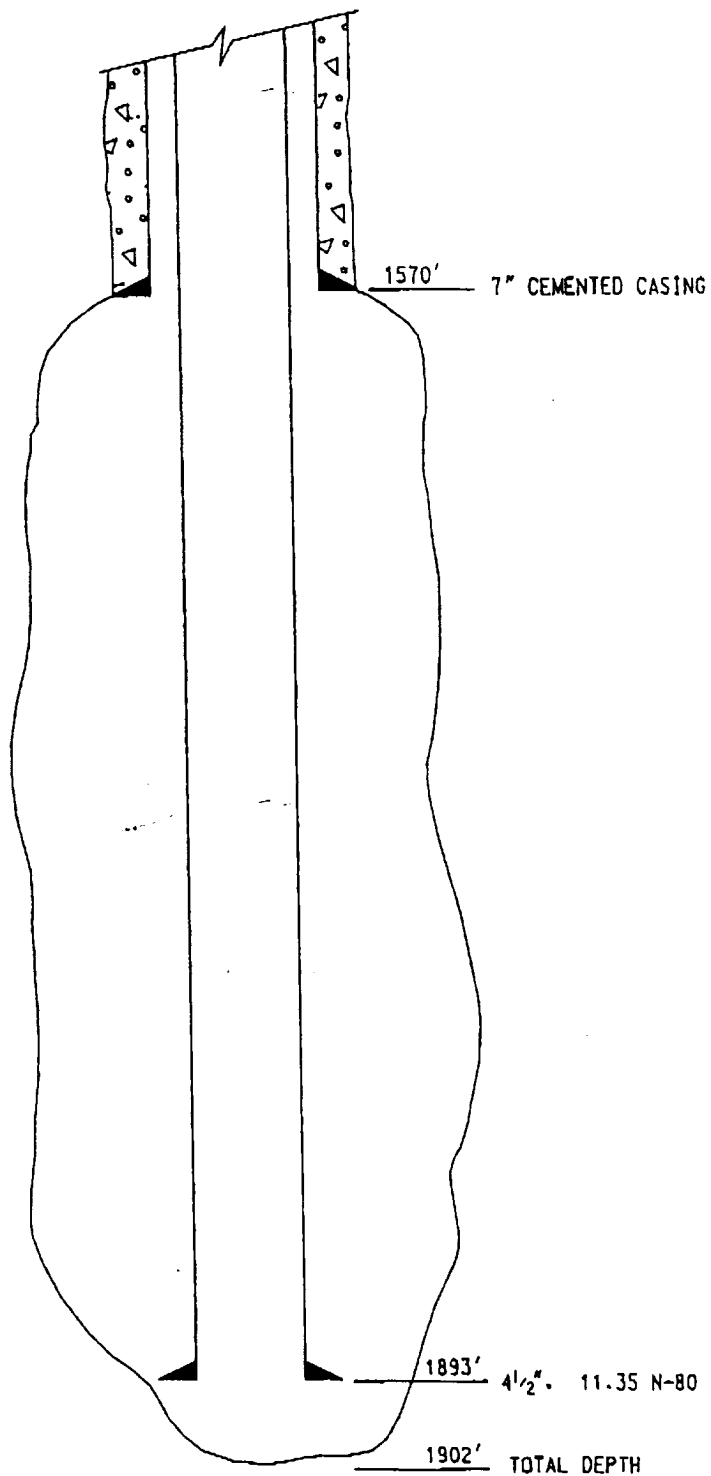
DATE

Conditions of approval, if any:

DISTRICT I SUPERVISOR

Dynegy Midstream Services, LP
Monument, New Mexico
Workover Procedure
Cavern No 1

- 1) Move in and rig up a workover rig. Check tubing and annulus for pressure. If there is pressure, let it bleed to rig tank or brine header. If necessary, circulate down annulus and up tubing to clear hydro-carbons.
- 2) When it is safe, remove appropriate section of the tree. Nipple up a 10" 3M annular hydril.
- 3) Pick up 2 7/8" pup joint, spear stop and spear dressed with a grapple for 4 1/2" 11.35#/ft tubing. The total string weight in 10 lb/gal brine is 18,198 lbs. Spear into tubing and unseat the hanger. Pick up a couple of feet then watch the annulus for flow. If there is a flow, set hanger back down and circulate the annulus. If there is no flow, then pull tubing and hanger to next connection. Remove and lay down the spear tools. Remove and lay down the hanger/hanger joint. Pull the 4 1/2" tubing to 1,690 feet, rig up Sonic Surveys, Inc. and SonarWire, Inc. Run sonar from bottom to that depth. Pull out of the hole with the sonar tool, move the wireline service company out of the way. Pull the 4 1/2" tubing up to 1,645 feet, sonar that space. Pull out of the hole with sonar tool, move the wireline service company out of the way. Pull the 4 1/2" tubing up to 1,635 feet, sonar that space. Pull out of the hole with sonar tool, move the wireline service company out of the way. Pull the 4 1/2" tubing up to 1,605 feet, sonar that space. Pull out of the hole with sonar tool, move the wireline service company out of the way. Pull the 4 1/2" tubing up to 1,575 feet, finish the sonar log at this point. Pull out of the hole with the sonar tool, rig them down and move them out. Move the wireline service company out of the way. Finish pulling out of the hole with the 4 1/2" tubing.
- 4) Rig up Sonic Surveys, Inc., run a density log from as deep as you can get (last workover that was 1,670 feet) up to 1,500 feet. Repeat wash out section. Pull out of hole with density tool. Pick up and run a gyro log from 1,550 feet to surface. Rig down and move out that wireline service company.
- 5) Rig up Baker Atlas Wireline Service company. Run their SBT log (cement), Imaging Caliper Log (multi-finger) and their Digital Verti-Log. All logs run from 1,550 feet to surface. Rig down wireline company and move them out.
- 6) Rig up casing crew and external testing companies. Run a new string of 4 1/2" flush joint 11.60 lb/ft tubing to predetermined depth. Rig down casing crew and external testers.
- 7) Nipple down well control equipment, redress tree. Energize and test the 4 1/2" pack off. Release the workover rig.



PB-KBB Inc.
Subsurface Systems & Technology

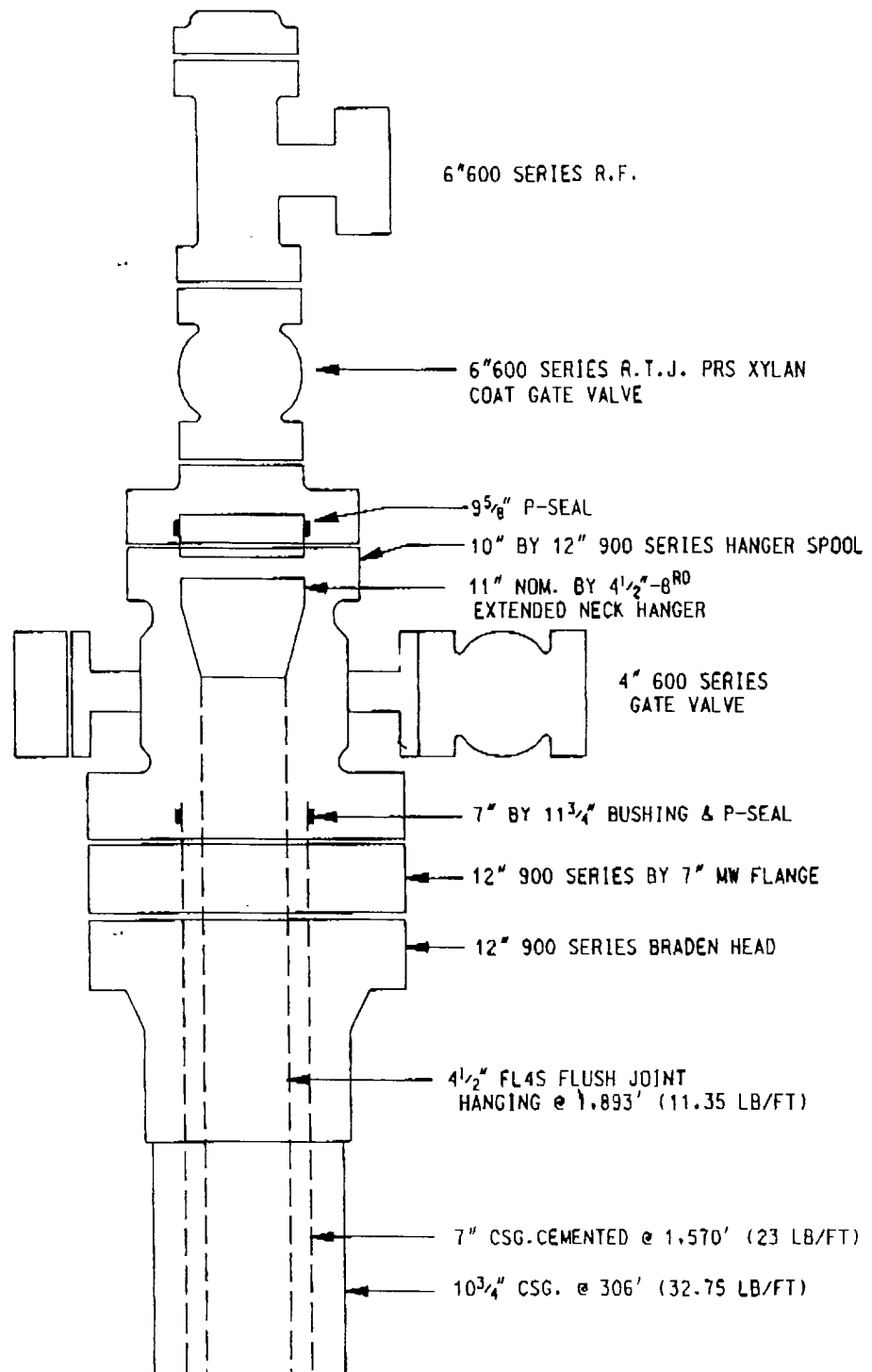
WARREN PETROLEUM

WELL 1 MONUMENT, NEW MEXICO

JOB No.
180

DESIGN: MM **DRAWN:** JK **CHECKED:** MM **DATE:** JULY 91 **SCALE:** AS SHOWN

DRAWING No.
180W301



PB-KBB Inc.
Subsurface Systems & Technology

WARREN PETROLEUM

PROPANE STORAGE WELL # 1

JOB No.
180

DESIGN: JEB

DRAWN: JK

CHECKED: MM

DATE: JULY 91

SCALE: AS SHOWN

DRAWING No.
180W101

Mr. Price,

I spoke with you earlier about the upcoming workover we need to perform on storage well # 1, since it appears we have a small leak in the 4&1/2" casing. This well is located at our Monument New Mexico facility in your District # 1. The well has already emptied, and we have scheduled a workover rig for next week to come in & rig up, to pull the 4&1/2" casing out of the well. We also will run a Sonar Log on the well to determine the cavern configuration & volume. A density log, a Gyro Deviation Survey, a Cement Bond Log, a Multi-finger Caliper Log, & a Digital Vertilog will also be performed. Next we will torque turn, & pressure test the connections of the new 4&1/2" casing, as we run it in. Then we will pressure test the wellhead & p-seal, and rig down the workover rig & move it off location. Then a Nitrogen/Brine Mechanical Integrity Pressure Test will be performed by Sonic Surveys Inc., to insure that there are not any leaks in the cavern.

Jim Browning with Cavern Consultants will be performing the workover & supervising the for us. He also performed the last workover on this well in 1991, when he was working for PBKBB. I have sent you a copy of the well schematic & a copy of the wellhead for your information. Please let me know as soon as possible, if I need to fill out a form, or what I need to do, to be able to start this workover next week if at all possible. Thank you for your assistance on this matter. If you have any questions please call me at 281-385-3115.

Larry Malloy

Regional Well Specialist
7/27/00



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

July 28, 2000

Mr. Larry Malloy
Dynergy Midstream Services, L.P.
Mont Belvieu Complex
P.O. Box 10
Mont Belvieu, Tx 77580

Re: Propane Storage Well #1 Leak Investigation and Repair.
Monument Gas Plant GW-025

Dear Mr. Malloy:

Per your request please find enclosed a C-103 form. Please fill out the "Notice of Intent To:" and submit to the OCD Hobbs Office District for approval. Please copy this office once the district has approved. Please note the OCD must witness the Mechanical Integrity Test during OCD's normal business hours.

If you have any other questions please do not hesitate to call 505-827-7155.

Sincerely;

A handwritten signature in black ink, appearing to read "Wayne Price-Pet".

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

DYNEGY MIDSTREAM SERVICES, L. P.
STORAGE WELL NO. 1
MONUMENT FIELD
LEA COUNTY, NEW MEXICO

I. INTRODUCTION

- 1.1 The purpose of the cavern test is to test the mechanical integrity of the Dynegy Midstream Services, L. P. Well No. 1 underground storage cavern in accordance with the guide lines set forth by the State of New Mexico Energy, Minerals, and Natural Resources Department.
- 1.2 The mechanical integrity test is accomplished by injecting nitrogen into the well casing to below the cemented casing seat, at a given test pressure, and recording the brine pressure, nitrogen pressure and nitrogen/brine interface level throughout a given test period.
- 1.3 Conditions and circumstances unforeseen or beyond the control of Sonic Survey's, Inc. may require altering this procedure during the test.

II. PREPARATION

- 2.1 The customer provides to Sonic Surveys, Inc. the physical description of the well, the maximum operating pressure at the wellhead and casing seat, and the desired test pressure gradient.
- 2.2 Customer prepares wellhead to allow nitrogen injection, simultaneous well logging, and attachment of pressure measuring gauges.
- 2.3 Sonic Surveys, Inc. attaches pressure recorders and dead weight gauges capable of displaying pressure changes of 1 P.S.I. to both brine and product sides of the wellhead. Digital pressure transducers with certified accuracy of .1 psia on the tubing and .2 psia on the annulus are connected to the well head. The calibrated pressure transducer's signals will be sent to a remote data collection and storage device which will allow continuous monitoring and storage of annulus and tubing pressures. The digital, recorded pressures will be retrieved at the test completion and may be used as a basis for test results, calculations, or conclusions.
- 2.4 The cavern is to be pressurized by pumping brine into the well tubing. The pumping rate should not exceed 2.5 psi per minute until the desired wellhead pressure has been achieved.
- 2.5 An inspection of the wellhead will be performed for external corrosion, faulty valves and packing or gasket leaks. The customer will make repairs as needed.

III. NITROGEN INJECTION

- 3.1 The cavern pressure must be near stable with a pressure decay rate equal to or less than 10 PSI/day or a pressure decay rate acceptable to Dynegy Midstream Services, L.P. before nitrogen can be injected. The pressure decay rate may be interpolated for stabilization periods less than 24 hours.
- 3.2 Temperatures will be recorded from surface to below the expected nitrogen/brine interface level. A temperature log of the test interval will be recorded.
- 3.3 A density base log will be run before nitrogen injection begins, a minimum of 50' below expected nitrogen/brine interface level to a minimum of 50' above cemented casing seat.
- 3.4 The density logging tool, in time drive mode, is spotted at a point determined by the test supervisor. Nitrogen is injected into the cemented casing at a constant, specified rate and temperature. When the nitrogen/brine interface is observed by the density logging tool, brine pressure, nitrogen pressure, and time of injection are recorded. The density logging tool is lowered the next point specified by the test supervisor and brine pressure, nitrogen pressure and time of injection are again recorded as the density logging tool indicates the nitrogen/brine interface. This procedure is repeated until the nitrogen/brine interface is approximately 50 feet or less above the final cemented casing seat.
- 3.5 Nitrogen injection is stopped in order to test the cemented casing string. An initial interface log is recorded of the interface in the cemented casing. Nitrogen and brine dead weight readings are recorded. The wellhead and associated piping and connections are checked for leaks and any leaks repaired. After a time interval determined by the test supervisor but not less than thirty minutes, a second interface log is recorded of the interface in the cemented casing. Nitrogen and brine dead weight readings are recorded. If nitrogen pressure has maintained constant and the nitrogen/brine interface in the cemented casing has not moved, the cemented casing string is considered tight and nitrogen injection is resumed. If the nitrogen/brine interface in the cemented casing moves uphole and the nitrogen pressure drops the well head is again checked for leaks and the casing test is extended. This procedure is repeated until the casing is considered tight or a leak is identified. The test supervisor may waive the pipe test or end the pipe test at any time.
- 3.6 Nitrogen injection is resumed until the nitrogen/brine interface reaches the final cemented casing seat. The time, nitrogen and brine pressures, and total volume of nitrogen injected into the well are recorded.

- 3.7 When the specified test pressure is reached, the time of injection, brine and nitrogen dead weight pressure readings, nitrogen/brine interface depth, and total volume of nitrogen injected into the well are recorded.
- 3.8 A Post Injection density log will be recorded from a minimum depth of 50' below the nitrogen/brine interface to a depth no less than 50' above the cemented casing seat. A temperature log of the test interval will be recorded.
- 3.9 The logging tool will be removed from the well, the valve closed, and the wellhead checked for leaks.

IV. TEST START- INITIALIZATION

- 4.1 After a stabilization period determined by the test supervisor, Test Start density and temperature logs are recorded. The nitrogen pressure rate of decay must be less than 10 psi/ 24 hours or Dynegy Midstream Services, L.P. may determine an acceptable rate of decay. The pressure decay rate may be interpolated for stabilization periods less than 24 hours.
- 4.2 Time and brine and nitrogen dead weight pressure readings will be recorded along with the depth of the nitrogen/brine interface and this time is designated as the official start of the cavern test.

V. TEST END - FINALIZATION

- 5.1 At the end of the specified test period, Test Finish density and temperature logs are recorded. The test period will not be less than 24 hours but will be sufficient time to ensure a sensitive test. Test sensitivity is determined by a minimum detectable leak rate of 1000 barrels or less of nitrogen per year or a minimum detectable leak rate acceptable to Dynegy Midstream Services, L.P.
- 5.2 Time and brine and nitrogen dead weight pressures and the nitrogen/brine interface depth are recorded, and this is designated as the official end of the cavern test.

VI. REPORTS ON TEST RESULTS

A detailed written report of the test procedures, results, and conclusions on the mechanical integrity test will be furnished to Dynegy Midstream Services, L. P. in a timely manner.

WELL DATA SHEET AND ESTIMATED TEST PARAMETERS

1.0 WELL DESCRIPTION

1.1	Name	Storage Well #1	
1.2	Operator	Dynergy Midstream Services, L. P.	
1.3	Location	Field	Monument
		County	Lea
		State	New Mexico
1.4	Cemented Casing	Size	7"
		Depth	1570 ft.
		Weight	23 lbs./ft.
1.5	Hanging Casing String	Size	4 1/2"
		Depth	1887 ft.
		Weight	11.6 lbs./ft.
1.6	Total Depth		1902 ft.

2.0 TEST PRESSURES

2.1	Casing Depth	1570 ft.
2.2	Test Gradient	0.7 psi/ft.
2.3	Brine Specific Gravity (assumed)	1.19 gm/cc
2.4	Nitrogen Temperature	90 ° f
2.5	Casing Seat Pressure	1099 psia
2.6	Surface Tubing Pressure	287 psia
2.7	Surface Nitrogen Pressure	1044 psia

3.0 VOLUMES

3.1	Volume of Annulus	31 bbls
3.2	Volume of Nitrogen in Annulus	11,200 scf
3.3	Volume of Borehole Interface	120 bbls
3.4	Volume of Nitrogen in Borehole	45,250 scf
3.5	Total Volume to Interface	151 bbls
3.6	Total Nitrogen to Interface	56,450 scf
3.7	Total Cavern Volume	168,141 bbls

4.0 COMPRESSIBILITY

4.1	Brine Pressure increase with Nitrogen Injection	332.6 psi
4.2	Beginning Brine Pressure	0 psig
4.3	Compressibility	.5 bbls/psi

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