

**Appendix D:  
NMOCD Order and Filings for Recompleted Well**

- Order 12809-C, 12/20/2010
- C-144 Closed-Loop Plan
- C-101 Application to Drill, 1/13/2011
- C-102 Well Location, 9/16/2010
- C-103 Spud Report, 5/11/2011
- C-103 TD Report, 5/23/2011
- C-103 Casing, Cement, logging, 6/21/2011
- C-103 Step Test, 6/27/2011
- C-103 MIT and Chart, 6/29/2011
- OCD e-mail approving Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan, dated August 11, 2011
- State of New Mexico \$50,000 Blanket Plugging Bond

**STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION COMMISSION**

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:**

**CASE NO. 14575  
ORDER NO. R-12809-C**

**APPLICATION OF TARGA MIDSTREAM SERVICES LIMITED PARTNERSHIP AS OPERATOR FOR VERSADO GAS PROCESSORS, LLC ("TARGA") FOR APPROVAL TO INJECT ACID GAS INTO TARGA'S EXISTING EUNICE GAS PLANT SALT WATER DISPOSAL (SWD) WELL NO. 1 (API NO. 30-025-21497), LEA COUNTY, NEW MEXICO**

**ORDER OF THE OIL CONSERVATION COMMISSION**

**BY THE COMMISSION:**

THIS MATTER came before the Oil Conservation Commission ("Commission") for hearing at 9 a.m. on December 9, 2010, in Santa Fe, New Mexico.

NOW, on this 20th day of December, 2010, the Commission, having considered the testimony and the record,

**FINDS THAT:**

(1) Due public notice has been given, and the Commission has jurisdiction of this case and its subject matter.

(2) The applicant, Targa Midstream Services Limited Partnership as operator for Versado Gas Processors, LLC ("Targa"), seeks authority to inject oil field produced water, natural gas processing plant waste water, and compressed acid gas (hydrogen sulfide and carbon dioxide) as commingled or separate streams into the San Andres formation, at an open hole depth interval from 4,250 feet to 4,950 feet below the surface, through its Eunice Gas Plant Salt Water Disposal (SWD) Well No. 1 (API No. 30-025-21497), which is located 2580 feet from the South line and 1200 feet from the West line, Unit Letter L of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico. The disposal well will serve Targa's Eunice Gas Plant, located approximately five miles away. The pipeline from the Eunice Gas Plant ("Plant") to the disposal well has been permitted separately.

(3) The Oil Conservation Division ("Division") entered its appearance in this case to offer evidence relevant to conditions it asked the Commission to place upon the permit if granted. No other parties appeared to oppose the application, but comment was received from two parties opposing the application pursuant to 19.15.1.14(C) NMAC.

(4) Targa presented the testimony of Mr. Alberto Gutierrez, a hydrogeologist from Geolex, Inc. and Mr. Clark White, Vice President of Targa.

(5) Targa's witnesses testified to the following:

a. Targa engaged Geolex, Inc. to locate a suitable subsurface reservoir into which it could inject the waste water and acid gas. Mr. Alberto Gutierrez of Geolex reviewed the study conducted on behalf of Targa to find a suitable location for acid gas injection and concluded that the proposed injection site met the requisite reservoir criteria. Based on his stratigraphic studies of the formations in this area, Mr. Gutierrez concluded that the San Andres formation has excellent porosity development to the south of the Plant and other reservoir development characteristics that will enable Targa to successfully inject waste water and acid gas into this reservoir.

b. Targa proposes to increase the depth of the existing well from 4,550 feet and to modify the well's completion to reflect best practices in acid gas injection/salt water disposal ("AGI/SWD") construction. Targa also intends to inject non-hazardous wastewater, produced water, and treated acid gas (including hydrogen sulfide, carbon dioxide, and traces of methane, nitrogen, and hydrocarbons) from Targa's Plant. Injection would occur through perforations from approximately 4,250 to 4,950 feet into the San Andres formation. These waste streams would all be continuously mixed and kept under pressure so as to inject a "dense gas" or "liquid" phase.

c. Gauge, density, and sonar surveys have been run on the closest of four nearby Liquefied Petroleum Gas ("LPG") storage wells, which were drilled to store "product" in the Salado ("salt") formation at depths from approximately 1,200 to 2,400 feet. Of those wells, the Skelly Gasoline Plant Well No. 4 (API No. 30-025-23853) was drilled to a depth of 2,075 feet, according to Division records, and is located 2471 feet from the South line and 1658 feet from the West line of Section 27, or 509 feet from the proposed acid gas injection well. The surveys on this well show the well has no remaining LPG "product" in the well and the well's enlarged radius (begun just below the 7-inch casing seat at 1,857 feet) extends a maximum of 60 feet in the direction of the proposed acid gas injection well.

d. None of the four LPG wells identified as being within ½ mile of this proposed injection well are being used anymore. All of those wells are or will be plugged in accordance with Division standards and requirements prior to commencement of injection of acid gas into the well that is the subject of this application.

e. The proposed injection volume is a maximum of 2,500 barrels per day of acid gas, coupled with produced water and non-hazardous waste water of up to 1,575 barrels per day; for a total injection volume of up to 4,075 barrels per day.

f. Targa proposes to implement a Division-approved remedial action for the Legacy Reserves Operating, LP's Langlie Mattix Penrose Sand Unit Well No. 252 (API No. 30-025-10499) to contend with the possibility of migration from the original plug set in that well from 3,692 feet to total depth of 4,066 feet by drilling out the current plug, including a calculated four feet of "lead wool" and re-plugging that interval consistent with current Division-approved procedures.

g. Targa further proposes that the order authorizing injection allow for continued operation until the later of (i) 30 years from the effective date of the order or (ii) until the maximum aggregate permitted injection volume of 44,651,812 barrels has been achieved.

h. Targa has published notice and furnished notice to all surface owners and all "affected parties" in the San Andres formation within a one-mile radius of the wellbore, and from the surface to the top of the San Andres formation and below the base of the San Andres formation to all "affected parties" within one mile of the proposed location as required by the Division and the Commission. Targa has also notified all appropriate governmental agencies and municipalities within a five mile radius including the City of Eunice.

i. Targa has prepared and filed a hydrogen sulfide contingency plan with the Division.

j. Targa operates an acid gas injection well in Crane County, Texas, which also injects water, hydrogen sulfide, and carbon dioxide.

k. The source of the hydrogen sulfide to be injected into this proposed well is approximately five miles away.

l. The proposal to recomplete the existing well to allow for acid gas injection will enable Targa to shut down the sulfur recovery unit at its main Eunice gas processing plant. The sulfur recovery unit is an air emission source.

m. The proposed acid gas injection well will enable Targa to discontinue releasing into the atmosphere approximately 1,226 tons per year of sulfur dioxide and 200 tons per year of carbon dioxide. Instead these gases will be injected underground.

(6) The Division presented the testimony of Mr. William V. Jones, a registered professional petroleum engineer employed by the Division's Engineering Bureau.

(7) Mr. Jones presented the following testimony regarding the Eunice Gas Plant SWD Well No. 1 and the relevant permitting history:

a. The Eunice Gas Plant SWD Well No. 1 was drilled for the purpose of disposal and permitted by Division Order SWD-29 on September 21, 1961, for salt water disposal into the upper San Andres formation through an open hole from 3,935 to 4,000 feet. The well was actually completed in 1961 as a disposal well into an open hole from 4,010 to 4,550 feet. A search of Division records found no logs for the disposal interval.

b. In 1974 in Order No. R-4936 issued in Case No. 5377 and in 1975 in Order No. R-5003 issued in Case Nos. 5403 and 5377, the Commission considered whether injection into the Queen or San Andres formations should be allowed to continue in wells located in Sections 13 through 36, Township 22 South, Range 37 East, and in Sections 1 through 12, Township 23 South, Range 37 East, because it appeared the injected water was not being contained in the formation in which it was placed. One of the wells the Commission considered was the Eunice Gas Plant Well No. 1. Ordering paragraph 11 on page 13 of Order No. R-5003 specifically allowed continued injection into the well, "until further order of the Commission, provided, however, that waters disposed of into said well shall be limited to normal gasoline plant water, effluent, and said disposal shall not exceed an average of 1500 barrels of water per day during any one-month period". Order No. R-5003 required remedial cement work on numerous area wells in an attempt to stop the water flows and more frequent, witnessed Bradenhead testing.

c. In 1983, a pump-in injection test on the Eunice Gas Plant SWD Well No. 1 reached a rate of 10 barrels per minute into the open hole interval of 4,010 feet to 4,550 feet at a bottomhole pressure of 3000 psi without showing any apparent evidence of fracturing.

d. On May 30, 2000, the SWD-29 permit was amended to allow a packer setting of 3,814 feet and disposal of produced water, cooling tower water, and boiler blowdown water into the existing open hole from 4,010 to 4,550 feet.

e. Targa appeared before the Division in Case No. 13865 in 2007 requesting to utilize a proposed new well, to be placed approximately 330 feet from the existing Eunice Gas Plant SWD Well No. 1, for disposal of natural gas processing wastes from Targa's Eunice Gas Plant and South Eunice Compressor Station into the San Andres formation through perforations from 4,500 to 5,000 feet. The Division issued hearing Order No. R-12809 granting this relief in September 14, 2007. Order No. R-12809 required the existing Eunice Gas Plant SWD Well No. 1 to be properly plugged and abandoned. Order No. R-12809 also provided that the injection authority granted by the order would terminate in one year if the operator had not commenced injection operations pursuant to the order, unless the Division granted an extension.

f. In August of 2008, Targa petitioned the Division to extend the deadline to commence disposal and cited the following reasons: (i) additional time is needed to plug nearby wells required in the order and (ii) the location of this acid gas

injection well may be moved if approved by the Division in an upcoming hearing. Case No. 13865 was re-opened, and Division Order No. R-12809-B was issued on August 8, 2008. The order granted Targa's request and extended the deadline to commence disposal to September 14, 2009.

g. In February 2009, Targa administratively requested that the permissions granted in Division Order No. R-12809 be transferred from its proposed new well to the nearby existing Eunice Gas Plant SWD Well No. 1. Targa proposed equipping the well with a new cemented liner extending from surface to 4,450 feet, and proposed produced water and acid gas disposal into an open hole from 4,450 to 4,950 feet in the San Andres formation. The Division issued administrative Order SWD-1161 on February 23, 2009, granting Targa's request. Order SWD-1161 set a new maximum surface disposal pressure limit of 900 psi, required installation of a one-way subsurface safety valve in the tubing, and retained jurisdiction for entry of further orders. Order SWD-1161 also provided that the injection authority granted by the order would terminate in one year if the operator had not commenced injection operations, unless the Division granted an exception.

h. On August 12, 2010, after receiving no further request to extend the deadline to commence disposal, Mr. Daniel Sanchez as enforcement manager of the Division, informed Targa in writing that SWD-1161 and R-12809, as amended, had expired.

i. On November 9, 2010, Targa filed its current application for approval to inject into the Eunice Gas Plant SWD Well No. 1.

j. Throughout the life of the well, the monthly reported disposal rate and disposal pressures appear to have been inaccurate. The Division's records as to disposed volumes are therefore unreliable.

(8) Mr. Jones presented the following testimony regarding the area of review data relevant to Targa's application:

a. There are a large number of wells in the Area of Review for the Eunice Gas Plant SWD Well No. 1: within ½ mile there are three wells that penetrate the San Andres or at least some part of the San Andres; within one mile there are 25 such wells; and within two miles there are over 230 such wells. In contrast, the seven permitted acid gas injection wells in New Mexico to date have no wells or only one well within one mile penetrating the disposal interval. Targa's proposed Monument AGI Well No. 1 has 11 wells within one mile, but its disposal interval is the Devonian formation.

b. Three wells within one half mile of the subject well penetrate the San Andres. Two of the wells, the Santa Rita #002 and the Santa Rita #012, are located almost ½ mile from the subject well. They both appear to be cemented through the San Andres. The third well is the Langlie Mattix Penrose Sand Unit Well No. 252 (the LMPSU), which is located only 1,650 feet from the subject well. The LMPSU was drilled into the top of the San Andres and plugged back with cement and approximately four feet of lead wool.

c. Twenty-two wells between ½ mile and one mile from the subject well penetrate the San Andres. There are at least seven wells that penetrate the San Andres formation beyond ½ mile but within one mile of the subject well that still have portions of casing over the San Andres formation unprotected with cement. There are other wells within one mile that penetrate the San Andres formation that have only light-weight cement across the San Andres formation.

d. Wells within the one mile area of review that penetrated (drilled through) the San Andres were spudded as early as 1937.

e. Other than the subject well, there are two active San Andres disposal wells within one mile and five active San Andres disposal wells within two miles. Reported disposal rates for these five wells range from 135 to 1,900 barrels per day.

f. This is an active area for oil field operations. There are no active San Andres production wells within one mile, but there are 39 San Andres producing wells within two miles, most of them are located to the northwest. The best oil producer within two miles is within one mile of the subject well and is completed in the Abo formation. New wells are being planned, possibly to exploit the Abo formation or other depths below the San Andres formation.

g. There are 25 wells shallower than the top of the San Andres located within 1/2 mile and 94 such wells within one mile. These shallower wells include many targeting the Penrose Sands where waterflood projects are active – Order No. R-3247 allowed the Langlie Mattix Penrose Sand Unit Waterflood Project. This South Eunice area is rife with reported waterflows – mostly within the Salado formation, located above the San Andres formation. This area is the “waterflow” area in Order No. R-5003, requiring remedial cementing and more frequent, witnessed Bradenhead surveys.

h. According to the testimony of Hobbs District Supervisor Chris Williams at the 2007 permitting hearing for this acid gas injection project, and according to the available records, there are possible Ogallala and Santa Rosa fresh water intervals extending from depths of 50 feet below the surface down to the top of the Rustler anhydrite.

i. From the available data, a thief zone appears to have hampered primary cementing jobs within or just below the San Andres formation. In many cases, subsequent squeeze jobs were done pursuant to Order No. R-5003 to raise cement and isolate upper wellbores.

j. Many of these wells targeting other deeper formations were only cemented across these deeper targets. Most were subsequently squeezed after shallower (Bradenhead) water flows were encountered.

k. The *in situ* waters within the San Andres are recognized as corrosive. Many well problems caused by corrosion have occurred throughout the Permian Basin from un-cemented San Andres intervals.

l. The open-hole log for the Laura J. May #1, 30-025-26480, drilled in 1980 and located less than a mile from the subject well, shows the San Andres to be

relatively uniform with porosity hovering near seven percent. It is not possible to tell only from the available log if the San Andres has adequate porosity development for disposal within the rock matrix, and it is difficult to estimate at which interval the San Andres will preferably take disposed fluids.

(9) Mr. Jones presented the following testimony regarding the Division's concerns with Targa's application:

a. A large number of potential problems exist just outside the ½ mile radius. For example:

- There are a large number of wells beyond the ½ mile radius but within a two mile radius, that penetrate the San Andres or some part of the San Andres.
- A thief zone appears to have hampered the cementing within or just below the San Andres.
- There are seven wells located beyond the ½ mile radius but within a two mile radius that penetrate the San Andres that have portions of their casing within the San Andres that are unprotected with cement. Due to the old wells and poor records, there could be more than seven.
- There are additional wells within a 1-mile radius that penetrate the San Andres formation that have only light weight cement across the San Andres formation. The San Andres was not a target producing formation, and cement designs were adjusted accordingly.
- If the un-cemented wellbores are exposed to acid gas, the acid gas will accelerate corrosion and accelerate pipe failure. In addition, the *in situ* waters are corrosive, and displacement of those waters may speed up corrosion and highlight problems in old uncemented wellbores.
- The area is an active drilling area, and it is likely wells will be drilled to the Abo or other depths below the San Andres formation, possibly penetrating the disposal plume.

b. Because of the large number of potential problems that exist just outside the ½ mile radius, it is important to ensure that any portion of this plume does not extend past the ½ mile radius. Targa predicts that the plume will extend less than ¼ mile in 30 years of injection. However, that prediction is based on assumptions, such as uniform (plug like) displacement into 700 feet of open hole and 10 percent porosity.

c. Without logs on the subject well, we can't at this time assume the porosity of the interval in this well taking fluid is an "effective" 10 percent.

d. We also cannot assume plug-like displacement over 700 feet of interval. For example, a 1983 pump-in injection test on this well showed that this well

can accept fluids at a rate of 10 barrels per minute at a bottomhole pressure of 3000 psi, despite offset logs indicating relatively low porosity. This is consistent with the cementing records indicating thief zones. There may be a fracture or fractures, and the injected fluid will preferentially follow those fractures to the offsetting un-cemented wellbores. In fact, permeability in reservoirs is best characterized by a log-normal distribution. This is especially true in lower porosities. There will be some intervals in this open hole that will preferentially take the injected acid gas and will therefore travel much further in a shorter amount of time.

e. The Commission should require Targa to provide additional data that can be used to better calculate the radius of the plume and establish a time limit for the permit.

f. Depending on the existing casing in the Eunice Gas Plant SWD #1 well, the Division recommends that the well be completed to allow disposal between 4,850 feet and 4,400 feet, to give approximately a 100 foot vertical factor of safety to existing un-cemented intervals in Area of Review wells.

g. Targa proposes to inject a maximum of 4,075 barrels per day; Order R-5003 limits injection in the well to 1,500 barrels per day. The Commission will need to determine whether the concerns raised in R-5003 have been addressed, and determine whether its order in this case can supersede R-5003.

(10) Mr. Jones testified that the Division recommended the following:

a. Prior to injecting acid gas, Targa should be required to construct the well as follows, and complete the following tests:

1. Depth. A better practice would be to limit the permitted depth to dispose of acid gas to above 4,850 feet and below 4,250 feet, giving a 100 foot vertical factor of safety to existing un-cemented intervals at the bottom of the injection interval in Area of Review wells.

2. Logging. As no logs are available, Targa should be required to run open hole electric logs on this disposal interval, including porosity and resistivity logs.

3. Injection tubing. Targa should equip the injection tubing so as to keep the acid gases under pressure and in a less corrosive phase. The injection tubing should be coated or constructed to prevent or retard corrosion from a mixture of hydrogen sulfide, wastewater, and carbon dioxide.

4. Safety valve. Targa should install a one-way safety valve in the tubing below the level of the well head, to prevent backflow of disposed fluids.

5. Pressure gauges. Targa should be required to keep the tubing/casing annulus loaded with diesel or other corrosion inhibited fluid, and pressure gauges on the tubing and tubing/casing annulus. The readings from these meters and gauges should be remotely transmitted to Targa's plant site and this data should be recorded and stored for review by the Division inspectors. This is necessary to prevent and detect dangerous leaks. It will also help to determine the extent of the plume and the effects on the reservoir.

6. Meters. Targa should be required to install meters on the disposed water and on the disposed acid gas, and keep records of the volumes of water and acid gas injected.

7. Step Rate Test. Targa should be required to run a Step Rate Test using disposal water after the proposed open hole is completed for disposal and before acid gas disposal is commenced. The procedure for this test should be approved by the Division prior to the test and Division personnel should be given an opportunity to witness the test.

8. Injection Survey. Targa should be required to run a tracer and temperature injection survey on this well while injecting water (no acid gas) at a representative rate, which approximates the disposal rate, and the results of that survey should be submitted to the Division. This survey will help determine what intervals in the large open hole disposal interval will most readily accept water and therefore help in calculation of the plume's radius.

9. Mechanical Integrity Test. Targa must demonstrate to the Hobbs District Office that the well has passed a mechanical integrity test.

10. Hydrogen Sulfide Contingency Plan. Targa must obtain approval from the Division's Environmental Bureau for a Hydrogen Sulfide Contingency Plan that complies with 19.15.11 NMAC before injecting acid gas.

b. Once Targa has completed the well to conform to the requirements set out above, has completed the required tests, and has a hydrogen sulfide contingency plan approved by the Division's Environmental Bureau, it should be allowed to commence injection of acid gas, subject to the following additional requirements:

- Disposal volumes. The Commission should set a disposal volume limit. Order No. R-5003 limits the disposal volume for this well to 1,500 barrels per day, and the Commission must determine whether it should supersede that order and allow the volume Targa has requested in its application.
- Pressure limits. The initial orders should provide that Targa may inject at 0.3 psi per foot, or 1300 psi. If the results of the step rate test indicate that a higher injection pressure is acceptable, Targa may request

an increased pressure limit when it re-opens the case for a determination on the length of the permit term. Any future pressure increases on this well should be allowed only after notice to affected persons and hearing.

- Mechanical Integrity Tests. The annular pressure integrity of this well or MIT test should be done at least once every five years or more often as required by the Hobbs district office.

c. Targa should be required to perform the following remedial work on Legacy Reserves Operating, LP's ("Legacy") Langlie Mattix Penrose Sand Unit Well No. 252 (API No. 30-025-10499), which is located within the Area of Review: Enter the well and drill out existing plugs down to 4,073 feet and then plug back the well to 3,700 feet using cement retainer squeeze cementing or verified cement plugs, under direction of the Division's Hobbs district office.

d. Within one year of the effective date of the order, Targa should be required to move to re-open Case 14575 for a hearing to offer proof that it has completed and is operating the well in accordance with the requirements of the order, and to determine the time limit for the permit. If Targa does not file its motion within one year of the effective date of this order, its authority to inject under this order should terminate automatically. If the Commission does not issue an order addressing the time limit for injection authority under this order within two years, the authority granted under this order should terminate automatically.

(11) The Commission concludes that Targa's proposed disposal well should be approved with all the conditions and requirements detailed above by the Division. Acid gas disposal is allowed to begin after running the required logs and tests.

(12) The case should be re-opened by Targa within 12 months. At that time, all additional evidence should be considered and used by the Commission to establish a limiting lifetime to this disposal permit. If Targa does not re-open the case within 12 months, the permit should expire automatically. If the Commission does not enter an order within two years of the effective date of this order addressing the limiting life of this permit, the permit shall expire automatically.

**IT IS THEREFORE ORDERED THAT:**

A. Targa Midstream Services Limited Partnership as operator for Versado Gas Processors, LLC ("Targa") is hereby authorized to recomplete the Eunice Gas Plant SWD Well No. 1 (API No. 30-025-21497), which is located 2580 feet from the South line and 1200 feet from the West line, Unit Letter L of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, as described below so as to permit the injection of oil field produced water, natural gas processing plant waste water and compressed acid gas (hydrogen sulfide and carbon dioxide) as commingled or separate streams into the San Andres formation, at an open hole depth interval from 4,250 feet to 4,850 feet below the surface.

B. The operator of the well (Applicant or any successor operator) shall take all steps necessary to ensure that the injected gas enters only the proposed injection interval and does not escape to other formations or onto the surface.

C. The operator shall complete the Eunice Gas Plant SWD Well #1 as follows:

- Depth. The operator shall complete the well with a disposal interval above 4,850 feet and below 4,250 feet.
- Logging. The operator shall run open hole electric logs on the disposal interval, including porosity and resistivity logs, and submit copies of the logs to the Division.
- Injection tubing. The operator shall equip the injection tubing so as to keep the acid gases under pressure and in a less corrosive phase. The injection tubing shall be coated or constructed to prevent or retard corrosion from a mixture of hydrogen sulfide, wastewater, and carbon dioxide.
- Packer. The packers shall be set within 100 feet above the casing shoe and the open hole interval.
- Safety valve. The operator shall install a one-way safety valve in the tubing below the level of the well head, to prevent backflow of disposed fluids.
- Pressure gauges. The operator shall keep the tubing/casing annulus loaded with diesel or other inhibited fluid, and install pressure gauges on the tubing and tubing/casing annulus. The readings from these meters and gauges shall be remotely transmitted to the operator's plant site and this data shall be recorded and stored for review by the Division inspectors.
- Meters. The operator shall install meters on the disposed water and on the disposed acid gas, and keep records of the volumes of water and acid gas injected.
- Step Rate Test. The operator shall run a step-rate test after the proposed open hole is completed for disposal and before acid gas disposal is commenced, and provide the results of the test to the Division. The operator shall run the test using an inert fluid such as produced water or waste water, and not with acid gas. The procedure for this test shall be approved by the Division prior to the test and Division personnel shall be given an opportunity to witness the test.
- Injection Survey. The operator shall run a tracer and temperature injection survey on this well as soon as practicable after the completion of the well and while injecting water (no acid gas) at a representative rate which approximates the disposal rate and supply the results of that survey to the Division.
- Mechanical Integrity Test. After installing injection tubing but prior to commencing injection operations, and at least once every five years thereafter, the operator shall pressure test the casing from the surface to the packer-setting depth to assure casing integrity. A mechanical integrity test is also required whenever the packer is re-set.
- Notice of Testing. The operator shall notify the Hobbs District Office of the Division of the time of the setting of the tubing and packer, and of any step

rate test or mechanical integrity test so that such operations can be witnessed or inspected.

- Hydrogen Sulfide Contingency Plan. Targa shall obtain approval from the Division's Environmental Bureau for a Hydrogen Sulfide Contingency Plan that complies with 19.15.11 NMAC before injecting acid gas.

D. Once the operator has completed the well to conform to the requirements set out above, has completed the required tests, and has a hydrogen sulfide contingency plan approved by the Division's Environmental Bureau, it shall be allowed to commence injection of acid gas, subject to the following additional requirements:

- Disposal volumes. The operator may inject at a maximum volume of 4,075 barrels per day. The injection volume limitation imposed by Order No. R-5003 is specifically superseded.
- Pressure limits. The operator shall inject at a pressure of no more than 1300 psi. If the results of the step-rate test indicate that a higher injection pressure is acceptable, the operator may request an increased pressure limit when it re-opens the case for a determination on the length of the permit term. Future pressure increases on this well shall be allowed only after notice to affected persons and hearing.
- Mechanical Integrity Tests. The annular pressure integrity of this well or MIT test shall be done at least once every five years or more often as required by the Hobbs district office. A mechanical integrity test is also required whenever the packer is re-set.

E. The operator shall perform the following remedial work on Legacy Reserves Operating, LP's ("Legacy") Langlie Mattix Penrose Sand Unit Well No. 252 (API No. 30-025-10499): Enter the well and drill out existing plugs down to 4,073 feet and then plug back the well to 3,700 feet using cement retainer squeeze cementing or verified cement plugs, under direction of the Hobbs district office.

F. Within one year of the effective date of this order, the operator shall move to re-open Case 14575 for a hearing to offer proof that it has completed the well and is operating the well in accord with the requirements of this order, to present the results of pressure transient testing to determine the extent of plume propagation and to determine the time limit for the permit. If the operator does not file its motion within one year of the effective date of this order, its authority to inject under this order shall terminate automatically.

G. If the Commission does not issue an order addressing the time limit for injection authority under this order within two years from the effective date of this order, the injection authority granted under this order shall terminate automatically.

H. When Case 14575 is re-opened for hearing, the operator shall be required to present the following:

- Proof that the well has been completed at the permitted depth, with the required tubing, safety valves, meters and pressure gauges in place.
- Proof that the operator obtained approval for its hydrogen sulfide contingency plan from the Division's Environmental Bureau.
- Proof that the operator has provided the Division with corrected reports of disposal volumes and disposal pressures for the well, or an explanation as to why that information is not available.
- Proof that the operator has completed the remedial work on the Legacy Reserves Operating LP Langlie Mattix Penrose Sand Unit Well No. 252.
- Results and data from the electric logs on the open hole interval.
- Results and data from the step rate test.
- Results and data from the tracer and temperature injection survey.
- Results of pressure transient testing to determine the extent of plume propagation.
- Readings from the meters and pressure gauges for disposal of water and acid gas.
- Results of the mechanical integrity test.
- The operator's calculation of the time it will take for the acid gas plume to reach ½ mile from the disposal well, incorporating the newly-acquired data.

I. When Case 14575 is re-opened, the Commission will impose a time/volume limit on the injection permit, based on the data collected. At a minimum, the time/volume limit shall be sufficient to ensure that injection will cease before the calculated, uniform radius plume reaches ½ mile from the disposal well. At that time, the operator shall be required to shut this well in and no further disposal allowed.

J. The injection authority granted by this order shall terminate one year after the effective date of this order if the operator has not commenced injection pursuant hereto, or if the operator has not filed a motion to re-open Case 14575 for a determination on the applicable time/volume limit for the order; provided, however, the Division Director, upon written request of the operator, may extend this time for good cause shown.

K. The injection authority granted by this order shall terminate two years after the effective date of this order if the Commission has not issued an order addressing the applicable time/volume limit for the injection authority.

L. Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

M. Jurisdiction is retained by the Commission for the entry of further orders as may be necessary for the prevention of waste or protection of correlative rights or upon failure of the operator to conduct operations (i) to protect fresh water or (ii)

consistent with the requirements in this order, whereupon the Commission may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



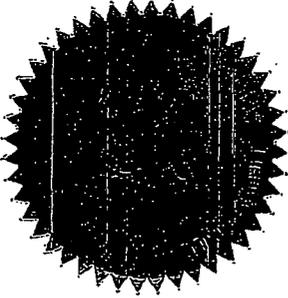
JAMI BAILEY, CPG, MEMBER



WILLIAM OLSON, MEMBER



MARK E. FESMIRE, P.E., CHAIR



SEAL

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
11 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-101  
June 16, 2008

Submit to appropriate District Office  
 AMENDED REPORT

**RECEIVED**  
JAN 18 2011  
HOBSOCD

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

Operator Name and Address Targa Midstream Services, LP 1000 Louisiana, Suite 4300, Houston, TX 77002-5036		OGRID Number 24650
Property Code 231668	Property Name Eunice Gas Plant SWD	API Number 30-025-21497
Proposed Pool 1 SWD: San Andres		Proposed Pool 2 <9612>

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	22S	37 E		2580	South	1200	West	Lea

**Proposed Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

**Additional Well Information**

Work Type Code D	Well Type Code m-AGI	Cable/Rotary R	Lease Type Code P F	Ground Level Elevation 3335'
Multiple No	Proposed Depth 4850'	Formation San Andres	Contractor Key Energy	Spud Date

**Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
6 1/4	5 1/2	17 #	4850	185	Surface
15	10 3/4	32.7 #	300'	300	Surface
8 3/4	7	20 #	4010'	1750	Surface

see note below

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

This well is to be deepened in the San Andres zone. It will be used as an acid gas disposal well. Application to dispose of gas by injection into a porous formation not productive of oil and gas has been approved by the OCS - Case # 14575.

SWD-1161

Terminated

\* The surface and production casing already exists in this well

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *WA Baker II*  
Printed name: WA Baker II  
Title: Drilling Engineer  
E-mail Address: wbaker@cambrianmgmt.com

OIL CONSERVATION DIVISION	
Approved by:	<i>[Signature]</i>
Title:	<i>[Signature]</i>
Approval Date: 4-21-2011	Expiration Date: 4-21-2013
Conditions of Approval Attached <input type="checkbox"/>	

Date: 1-13-11

Phone: 432-620-9181

R-12809-C

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

**RECEIVED** State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised July 16, 2010  
Submit one copy to appropriate  
District Office  
 AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-21497	<sup>2</sup> Pool Code 96121	<sup>3</sup> Pool Name SWD, San Andres
<sup>4</sup> Property Code 23668	<sup>5</sup> Property Name Eunice Gas Plant SWD	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 24650	<sup>8</sup> Operator Name Targa Midstream Services Limited Partnership	<sup>9</sup> Elevation 3335

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	22S	37E		2580	South	1200	West	Lea

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>16</p>	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>WA Baker II</i> 9-16-10 Signature Date</p> <p>WA Baker II Printed Name</p> <p>wbaker@Cambrianmgmt.com E-mail Address</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey Signature and Seal of Professional Surveyor:</p>
	<p>Certificate Number</p>



Submit 1 Copy To Appropriate District  
 Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87401  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM  
 87505

State of New Mexico  
 Energy, Minerals and Natural Resources  
**OIL CONSERVATION DIVISION**  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-103  
 October 13, 2009

**HOBBS OGD**  
**JUN 08 2011**

WELL API NO. <b>30-025-01497</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name <b>Eunice Gas Plant SWD</b>
8. Well Number <b>1</b>
9. OGRID Number <b>24650</b>
10. Pool name or Wildcat <b>SWD - San Andres</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>3335 GR</b>

**SUNDRY REGISTRY 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  **AGI**

2. Name of Operator  
**Targa Midstream Services, LP**

3. Address of Operator  
**1000 Louisiana, Suite 4300, Houston, TX 77002-5036**

4. Well Location  
 Unit Letter **L** : **2580** feet from the **South** line and **1200** feet from the **West** line  
 Section **07** Township **29 S** Range **37 E** NMPM **Lea** County

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
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 checked="" type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: <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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**TD of 4850' was reached 5-18-11. Logs were run 5-19-11 and 5-20-11.  
 5 1/2" csg was run 3-22-11 (see attached) and set @ 4224' with the  
 stage tool @ 3883'. Rig was released on 5-23-11.**

Spud Date:

Rig Release Date: **5-23-11**

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

SIGNATURE **Denise Jones** TITLE **Regulatory Analyst** DATE **6-1-11**

Type or print name **Denise Jones** E-mail address: **djones@cambriongmt.com** PHONE: **432-620-9181**  
 For State Use Only

APPROVED BY:  TITLE **REGULATORY ANALYST** DATE **JUN 09 2011**  
 Conditions of Approval (if any):



Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 October 13, 2009

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

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.)		WELL API NO. 30-025-21497
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other Acid Gas Injection <input checked="" type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Targa Midstream Services, LP		6. State Oil & Gas Lease No.
3. Address of Operator 1000 Louisiana, Suite 4300, Houston, TX 77002-5036		7. Lease Name or Unit Agreement Name Eunice Gas Plant SWD
4. Well Location Unit Letter <u>L</u> : <u>2580</u> feet from the <u>South</u> line and <u>1200</u> feet from the <u>West</u> line Section <u>27</u> Township <u>22S</u> Range <u>37E</u> NMPM Lea County		8. Well Number # 1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3335 GR		9. OGRID Number 24650
		10. Pool name or Wildcat SWD: San Andres

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

<b>NOTICE OF INTENTION TO:</b> PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> BLOWHOLE COMMINGLE <input type="checkbox"/>		<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: Step Rate Test Procedure <input checked="" 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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Per order No. R-12809-C attached are: Attachment No. 1 - Wellbore Diagram  
 Attachment No. 2 - Test Procedure  
 Attachment No. 3 - Rig-up Diagram

Testing scheduled to start about June 30, 2011 per attachment No. 2. Please advise with concurrence with procedure.

Spud Date:  Rig Release Date:

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

SIGNATURE Denise Jones TITLE Regulatory Analyst DATE 06/22/2011

Type or print name Denise Jones E-mail address: djones@cambrianmgmt.com PHONE: 432-620-9181  
 For State Use Only

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 Conditions of Approval (if any): \_\_\_\_\_



Sundry Notices and Reports on Wells  
C-103  
Attachment No. 2  
June 22, 2011

Drilling and completion activities, including the setting of the packer and running of the injection tubing, have been completed on this well. Testing will be starting about June 29, 2011 to evaluate the well's injection capabilities. Following is the anticipated testing program that is meant to satisfy the requirements set out in Order Number R-12809-C. **Please advise of your approval of this program or what changes need to be made.**

Mechanical Integrity Test

A mechanical integrity test will be run to pressure test the casing from the surface to the packer per OCD rules. Verbal notification will be given to the Division's Hobbs office to allow witnessing if desired.

Step Rate Test

The Step Rate Test will be run to determine injection performance at various injection rates. The written procedure for the test is included below and the rig-up diagram will be submitted to the OCD at least 24 hours before starting the test. This step rate test procedure contains the following information:

1. A diagram of the mechanical configuration of the recompleted well.
2. A description of the previous injection test in the SWD well.
3. The well has not had any fracture treatments and the ISIP is Opsi.
4. C-115's showing past injection volumes and pressure history are on file with the NMOCD.

Downhole pressure gauges will be used to measure bottom hole pressures at injection rates greater than 1 bpm. Starting pump rates and pressures will be lower than the current rates and pressures (if the well is currently injecting) and there will be at least 3 steps below the 0.2 psi/ft gradient and 3 steps above the break-over point. Rate changes will be 0.5 bpm or smaller unless the OCD witness determines that bigger rate changes are necessary due to small incremental increases in pressure. Each step will be at least 15 minutes in duration unless otherwise determined by the OCD. Step duration must not be changed during the test.

According to historical records contained in Order No. R-12809-C in 1983, a pump-in injection test on the original Eunice Gas Plant SWD Well No. 1 reached a rate of 10 bpm into the open hole interval of 4,010 ft to 4,550 ft at a bottom hole pressure of 3,000 psi without showing any apparent evidence of fracturing.

The Step Rate Test design will take into account the current Order's maximum surface injection pressure limitation of 1,300 psi (equivalent to a fracture pressure gradient of 0.3

psi/ft) as well as the plant's ultimate need to dispose of approximately 4,075 bpd (2.8 bpm) of TAG and waste water. Accordingly, the following rate schedule is proposed:

Step	Rate (bpm)	Time (min)	Bbls	Cum
1	1.00	20	20	20
2	1.50	20	30	50
3	2.00	20	40	90
4	2.50	20	50	140
5	3.00	20	60	200
6	3.50	20	70	270
7	4.00	20	80	350
8	4.50	20	90	440
9	5.00	20	100	540
		180	540	

3.0 hrs

If the well reacts similarly to the SWD well's test in 1983, then an obvious breakover point will probably not be reached by the time the 9<sup>th</sup> Step is reached at 5.0 bpm. In other words, if the injection pressure at this point is below 1,300 psi, Targa will have no need to amend their order to raise the surface injection pressure limitation. However, if the injection pressure exceeds 1,300 psi (or if the injection pressure at 3.0 bpm is greater than 1,300 psi), and no breakover is witnessed, Targa may use the data collected to prepare a request to NMOCD for approval of a higher surface injection pressure limitation, pursuant to paragraph D of Order No. R-12809-C.

Verbal notice will be given to the Division's Hobbs office 24-48 hours prior to initiating the test to allow witnessing if desired.

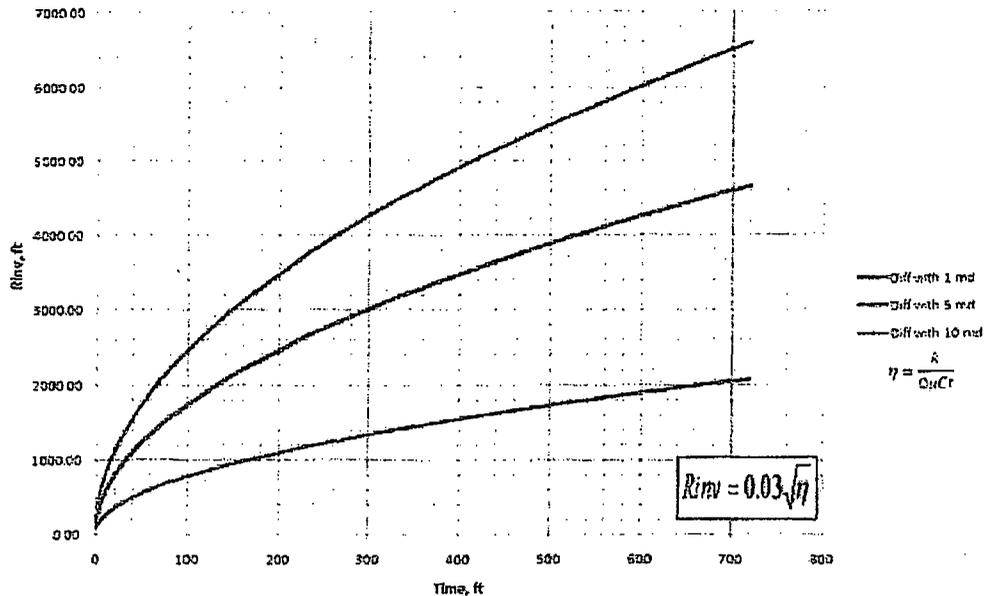
#### Transient (Falloff) Testing / Temperature Survey

This test will immediately follow the Step Rate Test.

Targa has designed an AGI system that will inject a maximum of approximately 2,500 bpd of (dense phase) acid gas, coupled with produced water and non-hazardous waste water of up to 1,575 bpd; for a total injection volume of up to 4,075 bpd (2.8 bbl/min).

The following graph uses assumed well properties and shows the sensitivity to formation permeability. In the base case, the expected time for the pressure transient to travel ½ mile is approximately 150 hours (6 days). If the permeability encountered is closer to 5 md, the corresponding time required for a transient to reach a radius of investigation of ½

mile would be approximately 11 days. Once the logs and core have been analyzed, the most appropriate duration for the injection test will be determined.

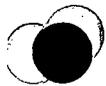


The proposed Falloff testing procedure encompassing the upper limits of the injection rate will be followed by a falloff period sufficient to test for any formation boundaries up to a minimum of ½ mile from the wellbore. The pressure data will be captured in downhole pressure gauge “bombs” designed to record pressure data. The proposed injection test will proceed as follows:

- Position the downhole gauges at the bottom of the injection interval if possible (4,825 ft)
- Begin waste water injection at 1.5 bpm. Inject for 2 hours. 180 bbls total.
- Increase injection rate to 3.0 bpm. Inject for 2 hours. 360 bbls (540 bbls cumulative total)
- Shut in for Falloff test for 150 hours (6 days).
- At end of 150 hours, pull out of hole with pressure bombs.
- Analyze pressure for transient pressures.
- Use data from tracer/temperature survey and transient testing for reservoir simulation and enhanced prediction of area affected by injection over 30 years.
- Provide results to NMOCD.

#### Injection Survey

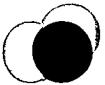
This test will follow the Transient (Falloff) Test as soon as practical. Notice will be given to the Division’s Hobbs office to allow witnessing if desired.



Order R-12809-C instructs the Operator to run a tracer and temperature injection survey on this well as soon as practical after completion of the well and while injecting water (no acid gas) at a representative rate which approximates the disposal rate and supply the results of that survey to the Division.

Targa will run this Injection Profile log to satisfy the requirements of the Order. The injection profile provides an analogy of injection fluid movement down the well bore and into the formation. The injection profile log also gives a good indication of the mechanical integrity of the well, including possible fluid channeling away from the well bore.

The service company will inject a radioactive (RA) material like Iodine 131 into the disposal stream of the well and measure the relative amounts of absorption each layer of the formation contributes to the overall injection. Several passes are usually required to develop a profile of the injection interval. A temperature probe on the bottom of the tool will help to correlate the various RA slug measurements, and an optional production logging "spinner" tool can measure the velocity changes of the injected fluid over the injection interval.

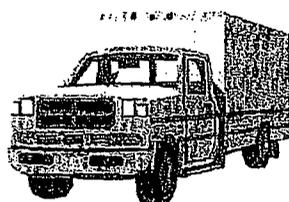


Sundry Notices and Reports on Wells

C-103

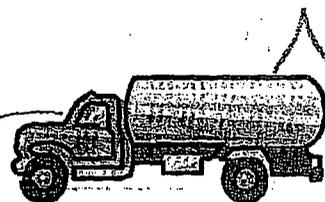
Attachement No. 3

June 22, 2011



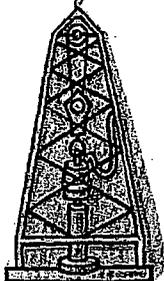
Schlumberger fiber  
optic wireline unit-

BHP gauge to be  
suspended in tubing  
at 4825' for test



Pump Truck-

Equipped with gauges  
and meters to measure  
fluid volumes and rates.  
Will pump fresh water



Eunice Gas Plant SWD #1 Wellhead

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N French Dr., Hobbs, NM 88241  
 District II - (575) 748-1283  
 1000 S First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 October 13, 2009

HOBBS OCD  
 JUN 23 2011  
 RECEIVED

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

WELL API NO. 30-025-21497 ✓
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> ✓
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Eunice Gas Plant SWD ✓
8. Well Number # 1 ✓
9. OGRID Number 24650 ✓
10. Pool name or Wildcat SWD: San Andres ✓

**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 Acid Gas Injection

2. Name of Operator  
Targa Midstream Services, LP

3. Address of Operator  
1000 Louisiana, Suite 4300, Houston, TX 77002-5036

4. Well Location  
 Unit Letter L : 2580 feet from the South line and 1200 feet from the West line  
 Section 27 Township 22S Range 37E NMPM Lea County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
3335 GR

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
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"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: Step Rate Test Procedure <input checked="" 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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Per order No. R-12809-C attached are: Attachment No. 1 - Wellbore Diagram  
 Attachment No. 2 - Test Procedure  
 Attachment No. 3 - Rig-up Diagram

Testing scheduled to start about June 30, 2011 per attachment No. 2. Please advise with concurrence with procedure.

Spud Date:  Rig Release Date:

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

SIGNATURE Denise Jones TITLE Regulatory Analyst DATE 06/22/2011

Type or print name Denise Jones E-mail address: djones@cambrianmgmt.com PHONE: 432-620-9181  
 State Use Only

APPROVED BY: [Signature] TITLE STATE MGR DATE 6-27-2011  
 Conditions of Approval (if any):

JUN 28 2011



Sundry Notices and Reports on Wells  
C-103

Attachment No. 2  
June 22, 2011

Drilling and completion activities, including the setting of the packer and running of the injection tubing, have been completed on this well. Testing will be starting about June 29, 2011 to evaluate the well's injection capabilities. Following is the anticipated testing program that is meant to satisfy the requirements set out in Order Number R-12809-C. **Please advise of your approval of this program or what changes need to be made.**

Mechanical Integrity Test

A mechanical integrity test will be run to pressure test the casing from the surface to the packer per OCD rules. Verbal notification will be given to the Division's Hobbs office to allow witnessing if desired.

Step Rate Test

The Step Rate Test will be run to determine injection performance at various injection rates. The written procedure for the test is included below and the rig-up diagram will be submitted to the OCD at least 24 hours before starting the test. This step rate test procedure contains the following information:

1. A diagram of the mechanical configuration of the recompleted well.
2. A description of the previous injection test in the SWD well.
3. The well has not had any fracture treatments and the ISIP is 0psi.
4. C-115's showing past injection volumes and pressure history are on file with the NMOCD.

Downhole pressure gauges will be used to measure bottom hole pressures at injection rates greater than 1 bpm. Starting pump rates and pressures will be lower than the current rates and pressures (if the well is currently injecting) and there will be at least 3 steps below the 0.2 psi/ft gradient and 3 steps above the break-over point. Rate changes will be 0.5 bpm or smaller unless the OCD witness determines that bigger rate changes are necessary due to small incremental increases in pressure. Each step will be at least 15 minutes in duration unless otherwise determined by the OCD. Step duration must not be changed during the test.

According to historical records contained in Order No. R-12809-C in 1983, a pump-in injection test on the original Eunice Gas Plant SWD Well No. 1 reached a rate of 10 bpm into the open hole interval of 4,010 ft to 4,550 ft at a bottom hole pressure of 3,000 psi without showing any apparent evidence of fracturing.

The Step Rate Test design will take into account the current Order's maximum surface injection pressure limitation of 1,300 psi (equivalent to a fracture pressure gradient of 0.3

psi/ft) as well as the plant's ultimate need to dispose of approximately 4,075 bpd (2.8 bpm) of TAG and waste water. Accordingly, the following rate schedule is proposed:

Step	Rate (bpm)	Time (min)	Bbls	Cum
1	1.00	20	20	20
2	1.50	20	30	50
3	2.00	20	40	90
4	2.50	20	50	140
5	3.00	20	60	200
6	3.50	20	70	270
7	4.00	20	80	350
8	4.50	20	90	440
9	5.00	20	100	540
		180	540	

3.0 hrs

If the well reacts similarly to the SWD well's test in 1983, then an obvious breakover point will probably not be reached by the time the 9<sup>th</sup> Step is reached at 5.0 bpm. In other words, if the injection pressure at this point is below 1,300 psi, Targa will have no need to amend their order to raise the surface injection pressure limitation. However, if the injection pressure exceeds 1,300 psi (or if the injection pressure at 3.0 bpm is greater than 1,300 psi), and no breakover is witnessed, Targa may use the data collected to prepare a request to NMOCD for approval of a higher surface injection pressure limitation, pursuant to paragraph D of Order No. R-12809-C.

Verbal notice will be given to the Division's Hobbs office 24-48 hours prior to initiating the test to allow witnessing if desired.

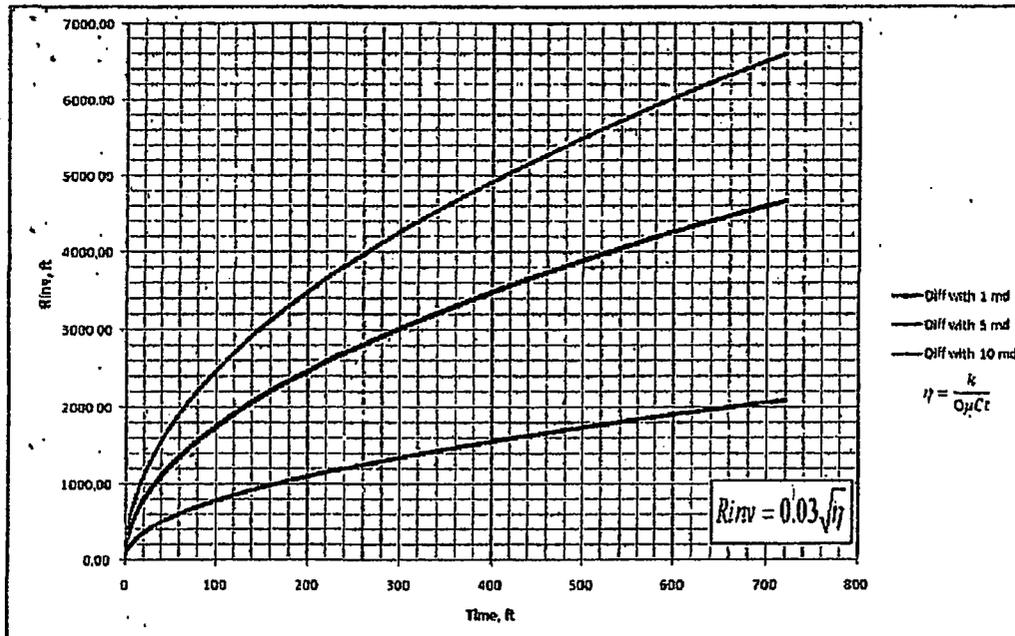
#### Transient (Falloff) Testing / Temperature Survey

This test will immediately follow the Step Rate Test.

Targa has designed an AGI system that will inject a maximum of approximately 2,500 bpd of (dense phase) acid gas, coupled with produced water and non-hazardous waste water of up to 1,575 bpd; for a total injection volume of up to 4,075 bpd (2.8 bbl/min).

The following graph uses assumed well properties and shows the sensitivity to formation permeability. In the base case, the expected time for the pressure transient to travel ½ mile is approximately 150 hours (6 days). If the permeability encountered is closer to 5 md, the corresponding time required for a transient to reach a radius of investigation of ½

mile would be approximately 11 days. Once the logs and core have been analyzed, the most appropriate duration for the injection test will be determined.



The proposed Falloff testing procedure encompassing the upper limits of the injection rate will be followed by a falloff period sufficient to test for any formation boundaries up to a minimum of ½ mile from the wellbore. The pressure data will be captured in downhole pressure gauge “bombs” designed to record pressure data. The proposed injection test will proceed as follows:

- Position the downhole gauges at the bottom of the injection interval if possible (4,825 ft)
- Begin waste water injection at 1.5 bpm. Inject for 2 hours. 180 bbls total.
- Increase injection rate to 3.0 bpm. Inject for 2 hours. 360 bbls (540 bbls cumulative total)
- Shut in for Falloff test for 150 hours (6 days).
- At end of 150 hours, pull out of hole with pressure bombs.
- Analyze pressure for transient pressures.
- Use data from tracer/temperature survey and transient testing for reservoir simulation and enhanced prediction of area affected by injection over 30 years.
- Provide results to NMOCD.

#### Injection Survey

This test will follow the Transient (Falloff) Test as soon as practical. Notice will be given to the Division’s Hobbs office to allow witnessing if desired.

Order R-12809-C instructs the Operator to run a tracer and temperature injection survey on this well as soon as practical after completion of the well and while injecting water (no acid gas) at a representative rate which approximates the disposal rate and supply the results of that survey to the Division.

Targa will run this Injection Profile log to satisfy the requirements of the Order. The injection profile provides an analogy of injection fluid movement down the well bore and into the formation. The injection profile log also gives a good indication of the mechanical integrity of the well, including possible fluid channeling away from the well bore.

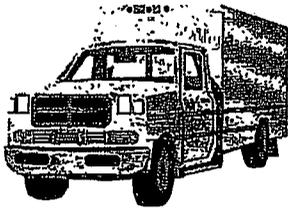
The service company will inject a radioactive (RA) material like Iodine 131 into the disposal stream of the well and measure the relative amounts of absorption each layer of the formation contributes to the overall injection. Several passes are usually required to develop a profile of the injection interval. A temperature probe on the bottom of the tool will help to correlate the various RA slug measurements, and an optional production logging "spinner" tool can measure the velocity changes of the injected fluid over the injection interval.

Sundry Notices and Reports on Wells

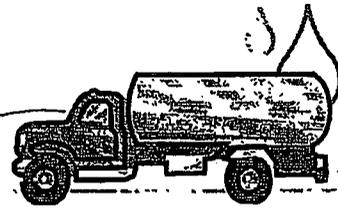
C-103

Attachement No. 3

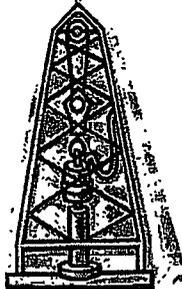
June 22, 2011



Schlumberger fiber  
optic wireline unit-  
  
BHP gauge to be  
suspended in tubing  
at 4825' for test



Pump Truck-  
  
Equipped with gauges  
and meters to measure  
fluid volumes and rates.  
Will pump fresh water



Eunice Gas Plant SWD #1 Wellhead

Submit 1 Copy To Appropriate District Office  
 District I  
 1625 N French Dr, Hobbs, NM 88240  
 District II  
 11 W Grand Ave, Artesia, NM 88218  
 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  
 October 13, 2009

HOBBS OCD  
 JUN 22 2011

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

SUNDRY NOT RECEIVED 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.)		WELL API NO. 30-025-21497
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other Acid Gas Injection <input checked="" type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Targa Midstream Services, LP		6. State Oil & Gas Lease No.
3. Address of Operator 1000 Louisiana, Suite 4300, Houston, TX 77002-5036		7. Lease Name or Unit Agreement Name Eunice Gas Plant SWD
4. Well Location Unit Letter <u>L</u> : <u>2580</u> feet from the <u>South</u> line and <u>1200</u> feet from the <u>West</u> line Section <u>27</u> Township <u>22S</u> Range <u>37E</u> NMPM County <u>Lea</u>		8. Well Number #1
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 24650
10. Pool name or Wildcat SWD: San Andres		10. Pool name or Wildcat SWD: San Andres

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

<b>NOTICE OF INTENTION TO:</b> PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/>	<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input checked="" type="checkbox"/>
OTHER: _____	OTHER: Logging Program <input checked="" 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 19.15.7.14 NMAC: For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

On 5/19-20/2011 the Open Hole logging and coring programs were completed. Copies of the Neutron Density/Gamma Ray, Resistivity, and eXtended Range Micro-Imager are attached for your files.

Following casing and cementing (reported in a separate Casing/Cement Job C-103 on 6/1/2011), a Cement Bond Log was performed on 6/3/2011. The CBL shows that the cement extends from the 5 1/2" casing shoe to the TOC at 1059 ft, approximately 2950 ft up into the surrounding 7" casing. A Gamma-Ray/CCL Depth Control log was run on 6/7/11 and found that the bottom of the 5 1/2" casing was set at 4258' depth, not 4224' as stated in the Casing/Cement Job C-103 submitted on 6/1/2011. Copies of the Cement Bond log and Gamma-Ray/CCL Depth Control log are attached for your files.

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

SIGNATURE [Signature] TITLE Consultant to Targa Midstream Services DATE 6/21/2011

Type or print name Alberto A. Gutiérrez E-mail address: aag@geolex.com PHONE: 505-842-8000

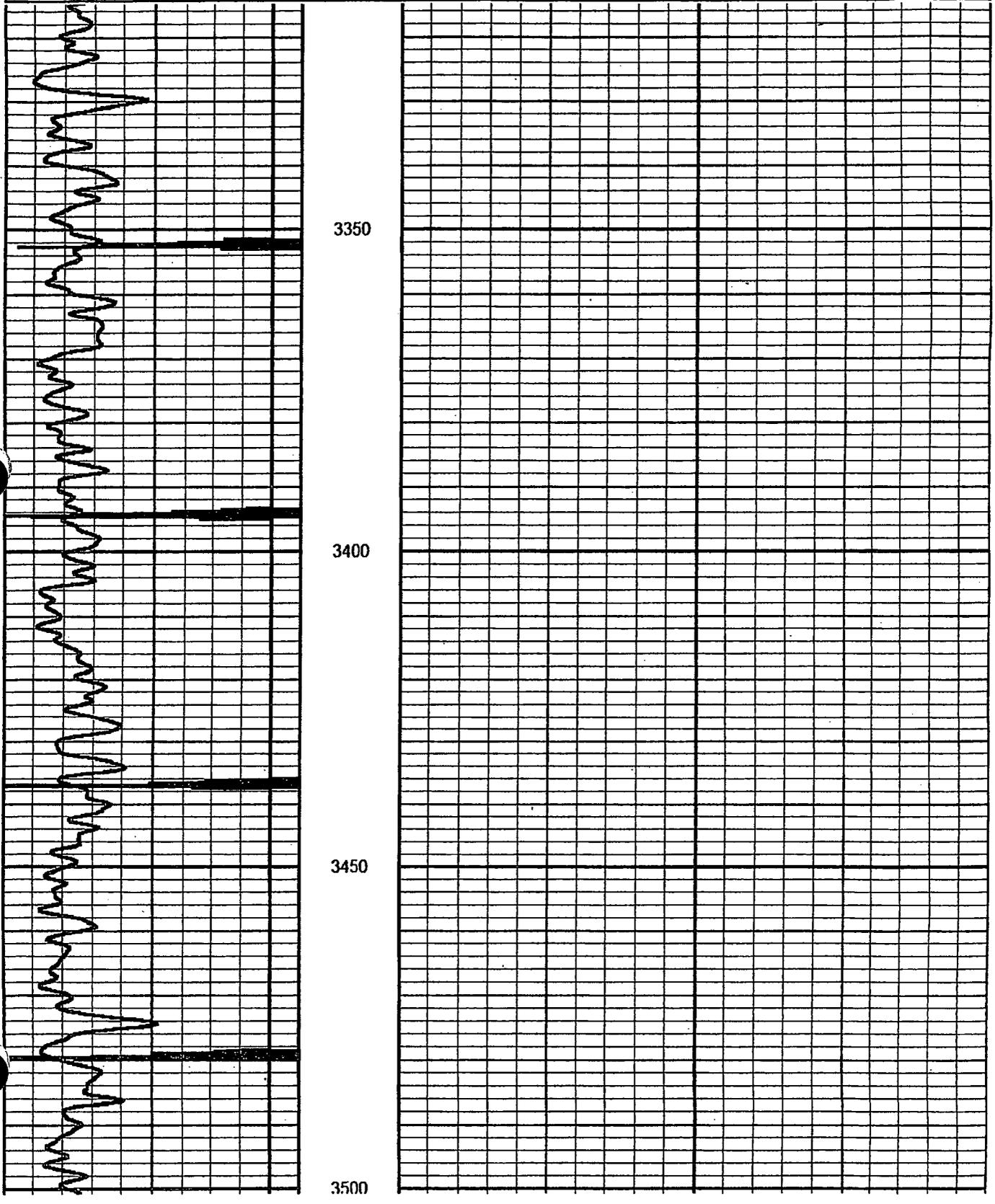
APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE AUG 11 2011

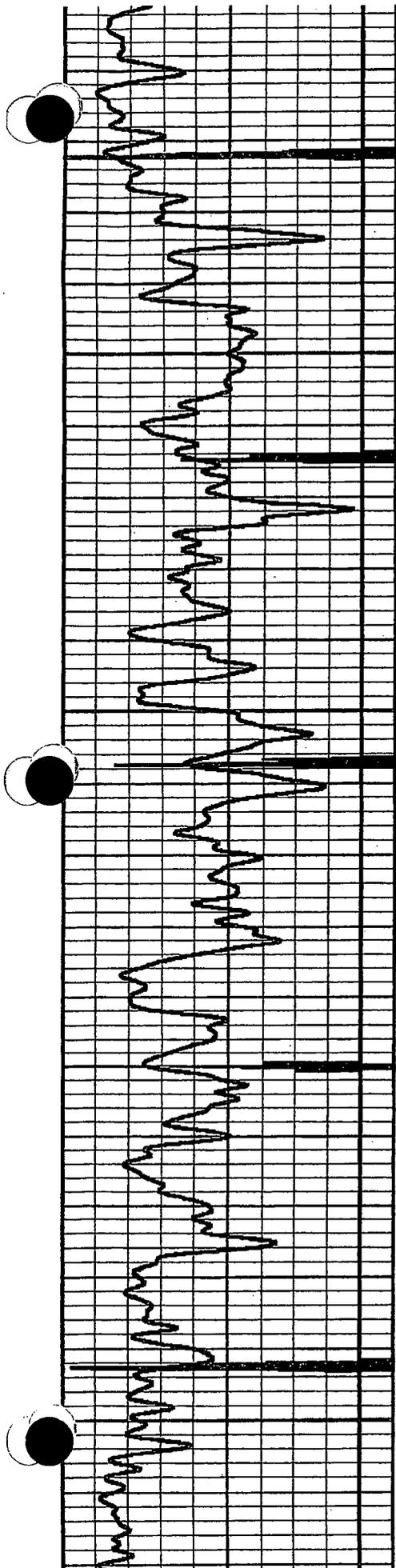
Conditions of Approval (if any):



Database File: targamidstream.db  
Dataset Pathname: DEPTHCONT/well/run1/pass6  
Presentation Format: cntcnts  
Dataset Creation: Tue Jun 07 13:01:31 2011 by Log Std Casedhole 10081  
Charted by: Depth in Feet scaled 1:240

0	GAMMA-RAY (GAPI)	100
-2.25	CCL	0.25



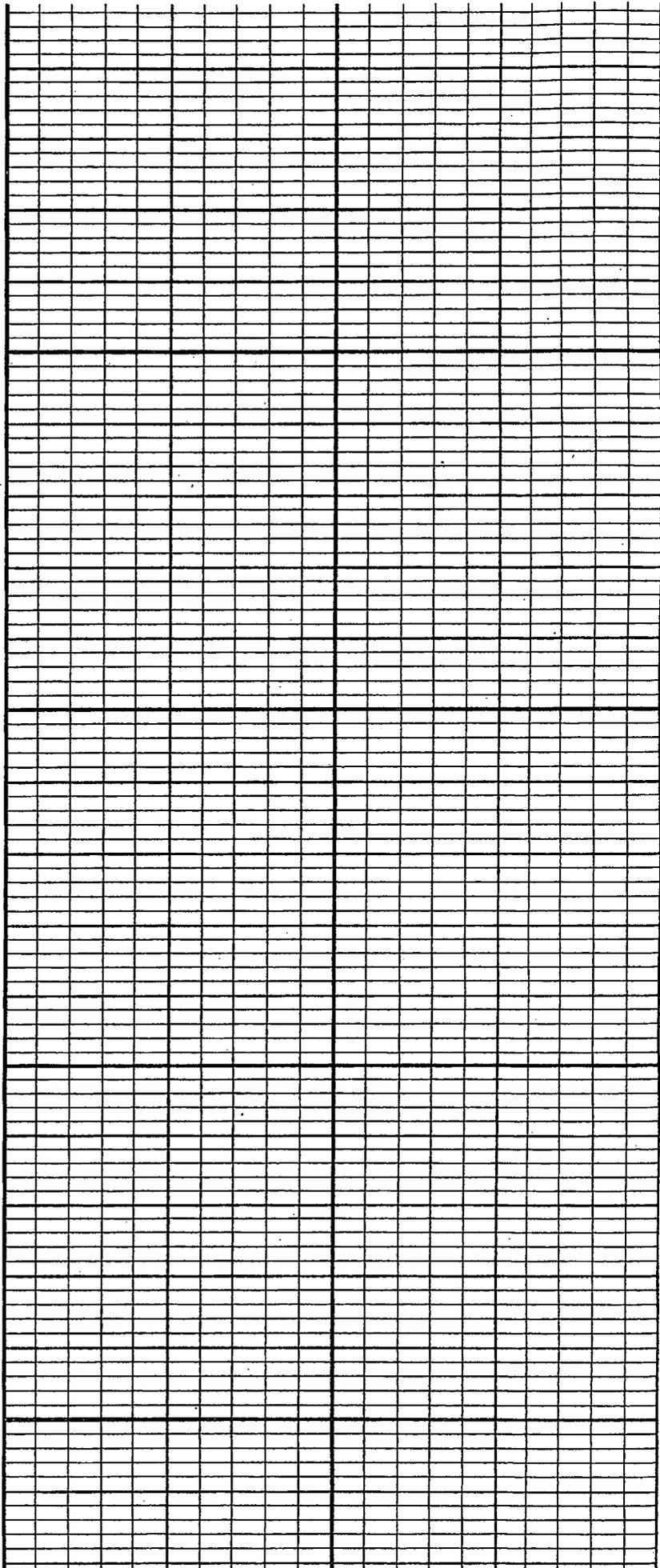


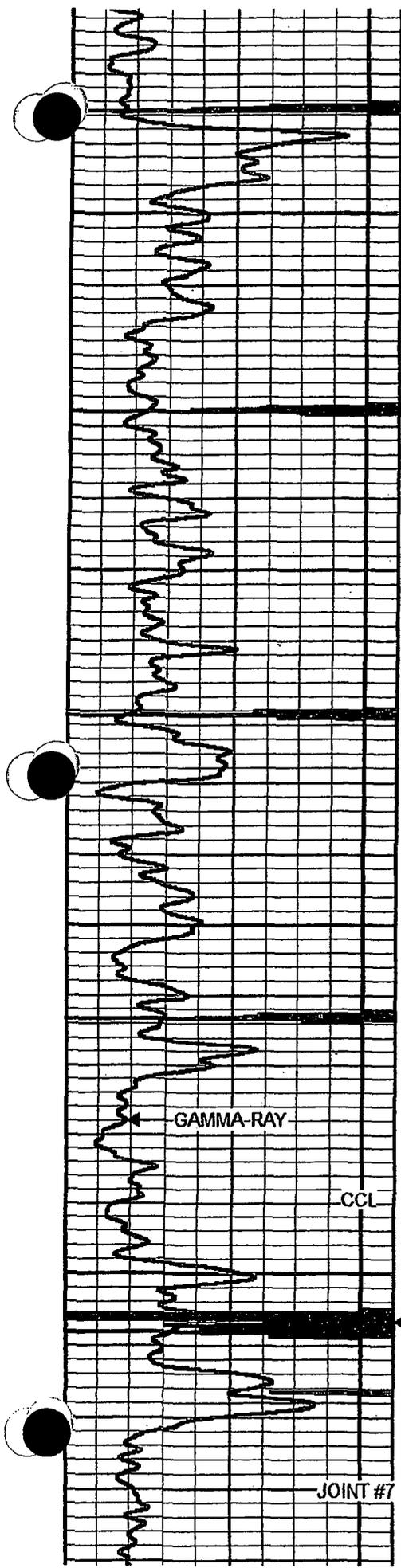
3550

3600

3650

3700





3750

3800

3850

5.5"  
CASING

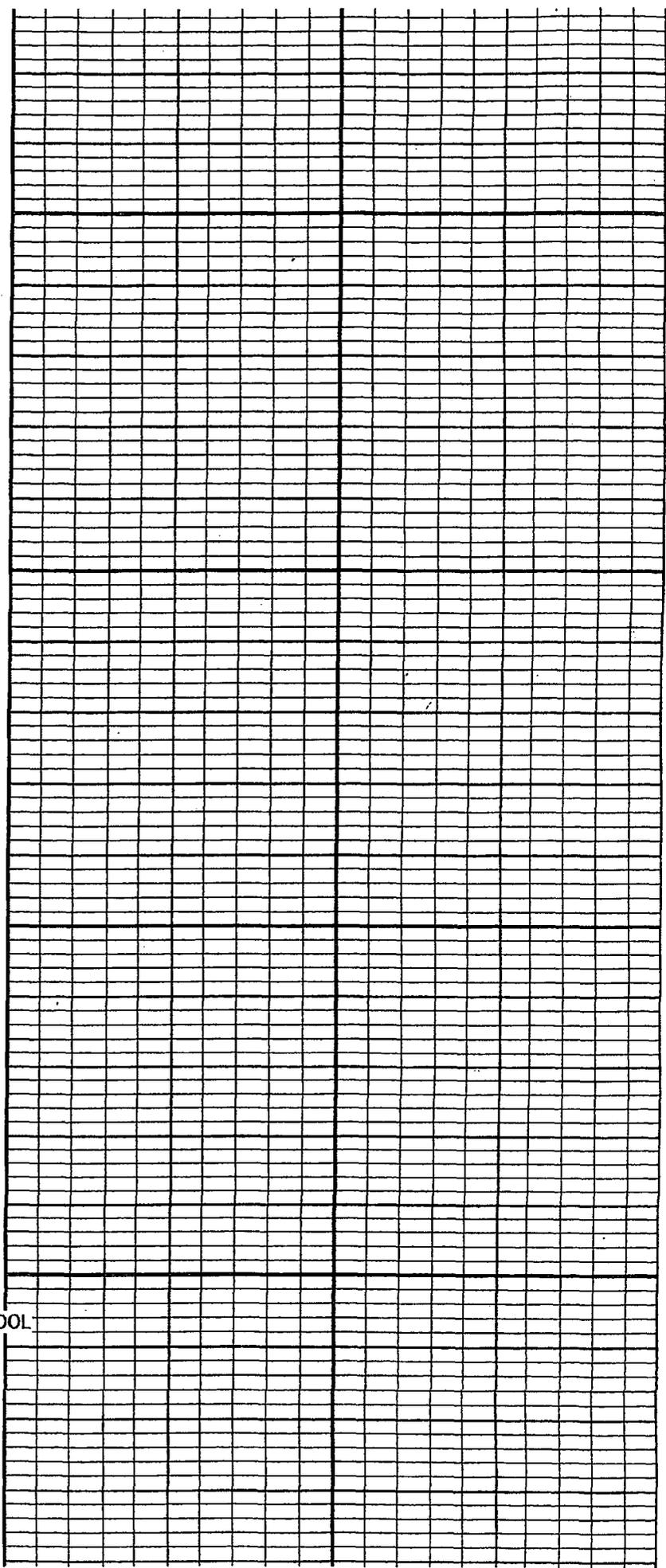
3900

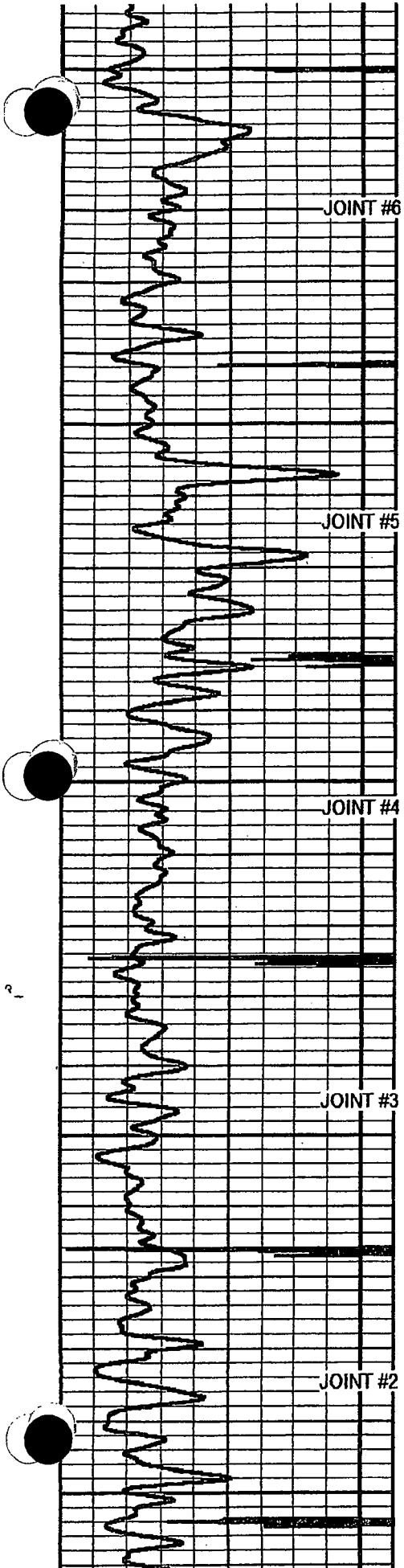
GAMMA-RAY

CCL

D.V. TOOL

JOINT #7





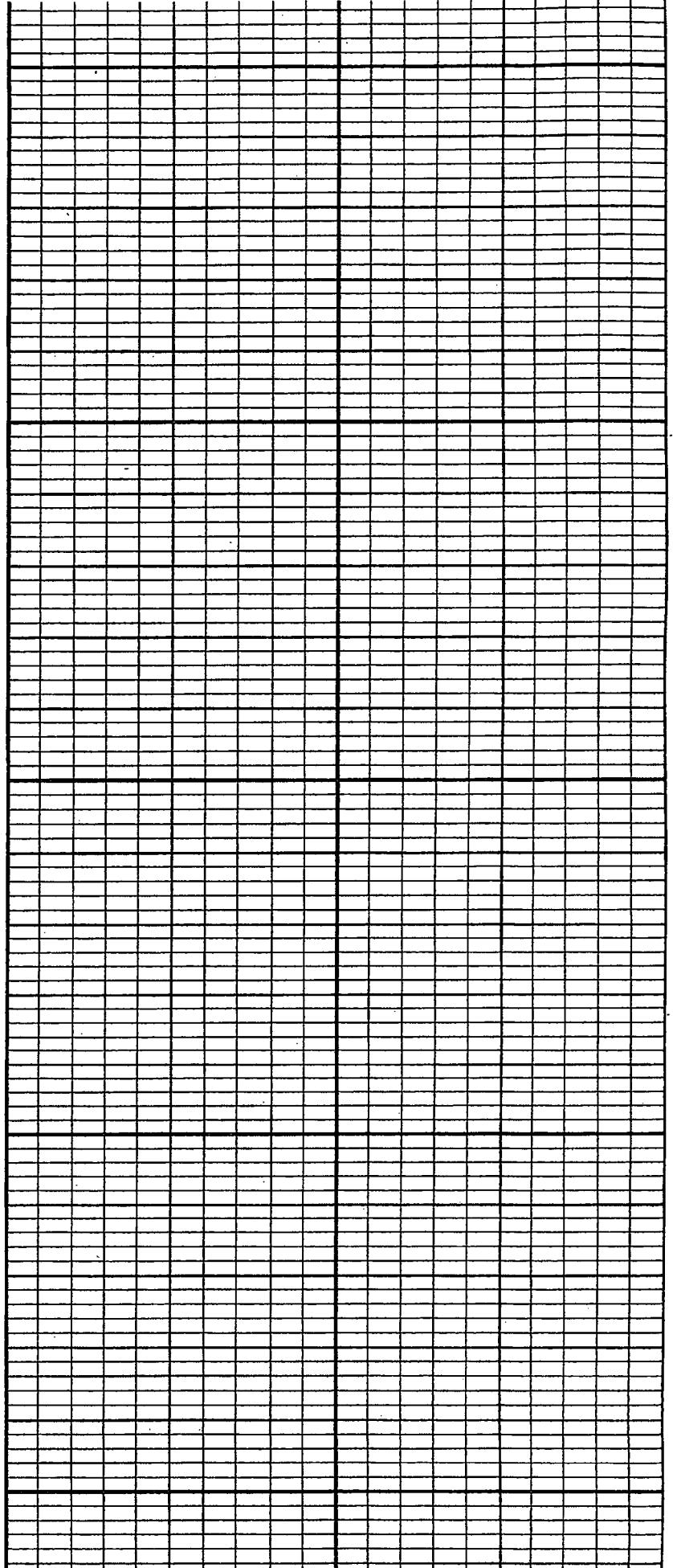
3950

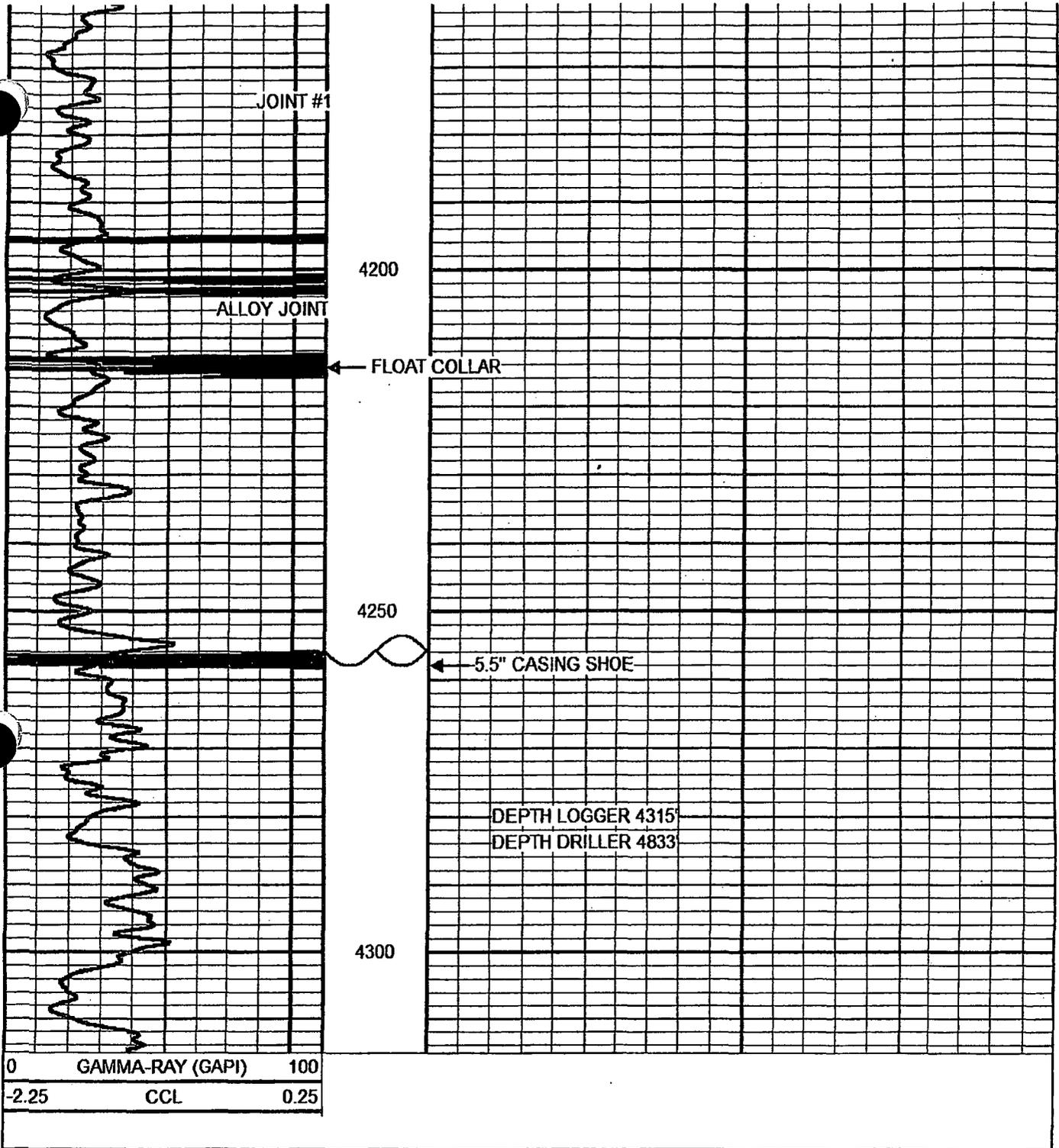
4000

4050

4100

4150





# REPEAT SECTION

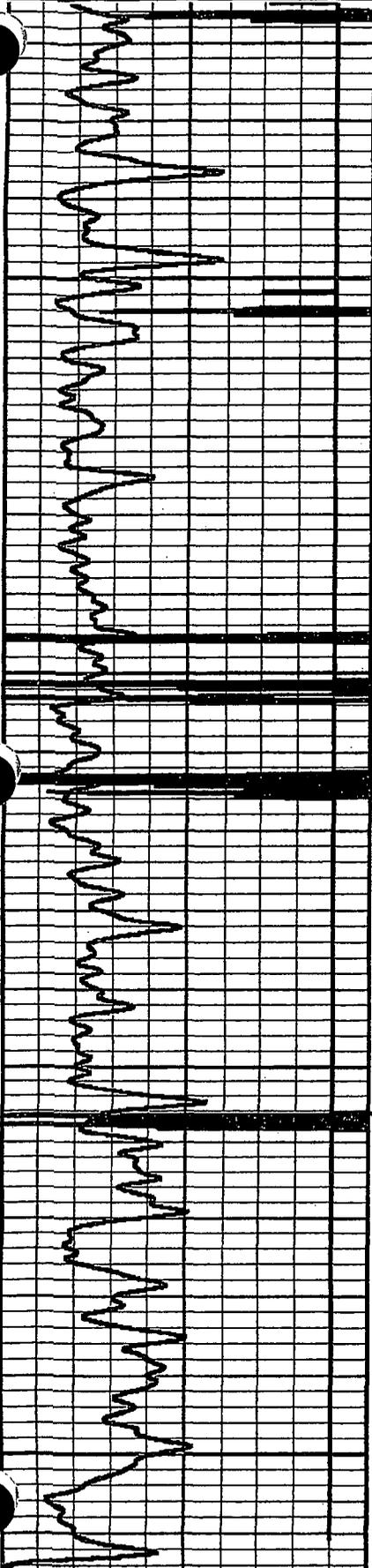
Database File: targamidstream.db  
 Dataset Pathname: DEPTHCONT/well/run1/pass5  
 Presentation Format: cntcnts  
 Dataset Creation: Tue Jun 07 12:57:43 2011 by Log Std Casedhole 10081  
 Charted by: Depth in Feet scaled 1:240

0	GAMMA-RAY (GAPI)	100
---	------------------	-----

-2.25

CCL

0.25



4150

4200

4250

4300

0 GAMMA-RAY (GAPI) 100

-2.25 CCL 0.25

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-STNDRD (GO) Standard Cable Head	1.00	1.69	10.00
CCL	3.92					
GR	2.54		GR-Probe275dig (pr100332) Probe Digital Gamma CCL	4.75	2.75	57.00

Dataset: targamidstream.db: DEPTHCONT/well/run1/pass6  
 Total Length: 5.75 ft  
 Total Weight: 67.00 lb  
 O.D.: 2.75 in

#### Calibration Report

Database File: targamidstream.db  
 Dataset Pathname: DEPTHCONT/well/run1/pass6  
 Dataset Creation: Tue Jun 07 13:01:31 2011 by Log Std Casedhole 10081

#### Gamma Ray Calibration Report

Serial Number: pr100332  
 Tool Model: Probe275dig  
 Performed: Fri Apr 29 08:42:29 2011  
  
 Calibrator Value: 229.0 GAPI  
  
 Background Reading: 58.2 cps  
 Calibrator Reading: 295.0 cps  
  
 Sensitivity: 0.7000 GAPI/cps

Company TARGA MIDSTREAM SERVICES, LP  
Well EUNICE GAS PLANT SWD. #1  
Field SWD. SAN ANDRES  
County LEA State NEW MEXICO



GAMMA-RAY / CCL  
DEPTH CONTROL

Submit To Appropriate District Office  
 Two Copies  
 District I  
 1625 N French Dr., Hobbs, NM 88201  
 District II  
 W Grand Avenue, Artesia, NM 88210  
 District III  
 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 1220 S St Francis Dr., Santa Fe, NM 87505

HOBBS OGD  
 JUL 20 2011

State of New Mexico  
 Energy, Minerals and Natural Resources

Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-105  
 July 17, 2008

1. WELL API NO.  
30-025-21497
2. Type of Lease  
 STATE  FEE  FED/INDIAN
- 3 State Oil & Gas Lease No

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

- 4 Reason for filing:  
 COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)  
 C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13 K NMAC)

- 5 Lease Name or Unit Agreement Name  
Eunice Gas Plant SWD
6. Well Number: 1

7. Type of Completion.  
 NEW WELL  WORKOVER  DEEPENING  PLUGBACK  DIFFERENT RESERVOIR  OTHER

8. Name of Operator  
Targa Midstream Services, LP
- 9 OGRID  
24650
10. Address of Operator  
1000 Louisiana, Suite 4300, Houston, TX 77002-5036
- 11 Pool name or Wildcat  
SWD. San Andres

9612

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	L	27	22S	37E		2580	South	1200	West	Lea
BH:	L	27	22S	37E		2580	South	1200	West	Lea

13. Date Spudded  
05/13/2011
14. Date T.D. Reached  
05/18/2011
15. Date Rig Released  
05/23/2011
- 06/13/2011
- 17 Elevations (DF and RKB, RT, GR, etc) 3345' GR
- 18 Total Measured Depth of Well  
4850'
- 19 Plug Back Measured Depth  
4850'
- 20 Was Directional Survey Made?  
No
- 21 Type Electric and Other Logs Run  
DSN-SD, Res, Caliper, XMI, GR/CBL

- 22 Producing Interval(s), of this completion - Top, Bottom, Name  
4258 to 4850 San Andres

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"	32.7 #	300'	15"	300 sx (Circ)	
7"	20#	4010'	8 3/4"	1750 sxs (Circ)	
5 1/2"	17#	4258'	6 1/4"	310 sxs (TOC @ 1059')	

Non-Well Prod # 2809465

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8"	4219'	4190'

26. Perforation record (interval, size, and number)  
Open hole completion
- 27 ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.  
DEPTH INTERVAL  
4258'-4850'  
AMOUNT AND KIND MATERIAL USED  
50000gal 15% HCl w/ 2000 # rock salt

PRODUCTION

- 28 Date First Production  
7/14/2011
- Production Method (Flowing, gas lift, pumping - Size and type pump)  
AGI (Disposal Well)
- Well Status (Prod or Shut-in)  
Disposing
- Date of Test
- Hours Tested
- Choke Size
- Prod'n For Test Period
- Oil - Bbl
- Gas - MCF
- Water - Bbl
- Gas - Oil Ratio
- Flow Tubing Press.
- Casing Pressure
- Calculated 24-Hour Rate
- Oil - Bbl
- Gas - MCF
- Water - Bbl.
- Oil Gravity - API - (Corr.)

- 29 Disposition of Gas (Sold, used for fuel, vented, etc)  
NA
- 30 Test Witnessed By

31. List Attachments

32 If a temporary pit was used at the well, attach a plat with the location of the temporary pit NA (Closed Loop)

33 If an on-site burial was used at the well, report the exact location of the on-site burial.  
 NA Latitude Longitude NAD 1927

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Denise Jones  
 Printed Name Denise Jones Title Regulatory Analyst Date 7-15-11  
 E-mail Address djones@cambrianmgmt.com

ELG 7-26-2011 SWD-1161 R-12809

# INSTRUCTIONS

Form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or reamed well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	1138	T. Canyon	T. Ojo Alamo
T. Salt	1226	T. Strawn	T. Kirtland
B. Salt	2611	T. Atoka	T. Fruitland
T. Yates	2661	T. Miss	T. Pictured Cliffs
T. 7 Rivers		T. Devonian	T. Cliff House
T. Queen	2880	T. Silurian	T. Menefee
T. Grayburg	3416	T. Montoya	T. Point Lookout
T. San Andres	3962	T. Simpson	T. Mancos
T. Glorieta		T. McKee	T. Gallup
T. Paddock		T. Ellenburger	Base Greenhorn
T. Blinbry		T. Gr. Wash	T. Dakota
T. Tubb		T. Delaware Sand	T. Morrison
T. Drinkard		T. Bone Springs	T. Todilto
T. Abo		T.	T. Entrada
T. Wolfcamp		T.	T. Wingate
T. Penn		T.	T. Chinle
T. Cisco (Bough C)		T.	T. Permian

### OIL OR GAS SANDS OR ZONES

1, from.....NA - SWD .....to..... No. 3, from.....to.....  
 2, from.....to..... No. 4, from.....to.....

### IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to..... feet.....  
 No. 2, from.....to..... feet.....  
 No. 3, from.....to..... feet.....

### LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
			MIT Test previously submitted As attachment to C-103. Logs previously submitted as Attachments to a C-103.  Step rate, transient (Fall off) Test and injection profile Test will be submitted separately With C-103.				

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 11 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources  
**OIL CONSERVATION DIVISION**  
 220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-103  
 October 13, 2009

**HOBBS OCD**

**JUL 05 2011**

**RECEIVED**

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)		WELL API NO. 30-025-21497 ✓
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other - Acid Gas Injection <input checked="" type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Targa Midstream Services, LP		6. State Oil & Gas Lease No.
3. Address of Operator 1000 Louisiana, Suite 4300, Houston, TX 77002-5036		7. Lease Name or Unit Agreement Name Eunice Gas Plant SWD
4. Well Location Unit Letter <u>L</u> : <u>2580</u> feet from the <u>South</u> line and <u>1200</u> feet from the <u>West</u> line Section <u>27</u> Township <u>22S</u> Range <u>37E</u> NMPM Lea County		8. Well Number <u>1</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 24650
10. Pool name or Wildcat SWD: San Andres ✓		

12. 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 COMPL   
 DOWNHOLE COMMINGLE   
 OTHER:

**SUBSEQUENT REPORT OF:**  
 REMEDIAL WORK  ALTERING CASING   
 COMMENCE DRILLING OPNS.  P AND A   
 CASING/CEMENT JOB   
 OTHER: Ran Initial MIT

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

Initial MIT was run. Witnessed and signed by OCD representative.

Packer @ 4203'.

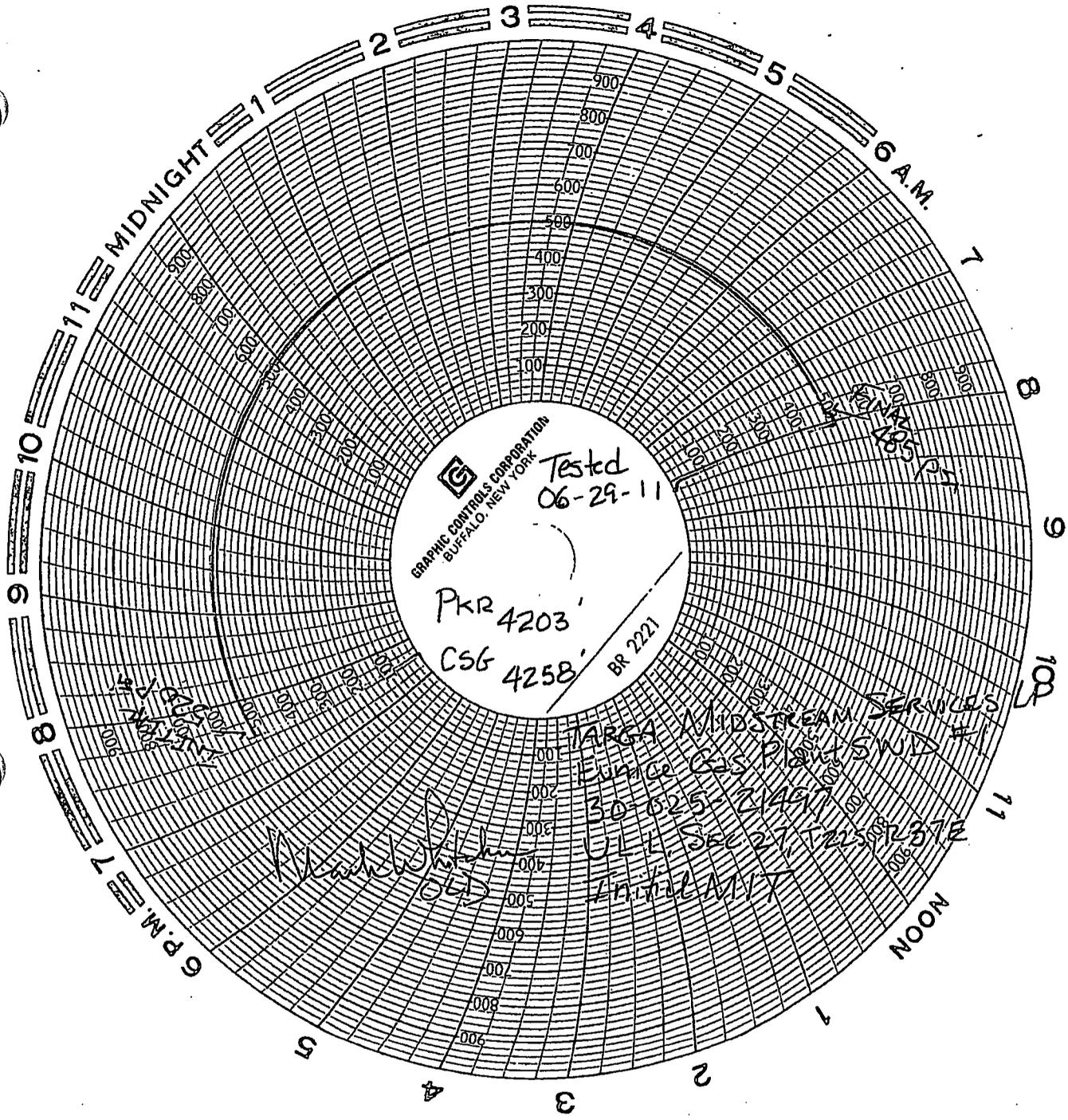
Spud Date:  Rig Release Date:

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

SIGNATURE Denise Jones TITLE Regulatory Analyst DATE 7-1-11

Type or print name Denise Jones E-mail address: djones@cambrianmgmt.com PHONE: 432-620-9181  
 For State Use Only

APPROVED BY: [Signature] TITLE State Manager DATE 7-6-2011  
 Conditions of Approval (if any):



GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

Tested  
06-29-11

PKR 4203

CSG 4258

BR 2221

TARGA MIDSTREAM SERVICES  
Leverage GAS PLANT SYDNEY  
30-025-21487  
ULL SEC 21 2250237E  
AN-TILAMT

**From:** Jones, Brad A., EMNRD [<mailto:brad.a.jones@state.nm.us>]

**Sent:** Thursday, August 11, 2011 5:08 PM

**To:** Wrangham, Calvin W.

**Subject:** RE: Eunice Plan

The Oil Conservation Division has completed the review of the Targa Eunice Gas Plant and AGI Pipeline/Well site Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan, dated August 11, 2011, and has determined it to be adequate. Targa Midstream Services, LLC has submitted a H<sub>2</sub>S contingency plan that demonstrates compliance with the applicable provisions of 19.15.11 NMAC. Targa Midstream Services, LLC shall implement the H<sub>2</sub>S Contingency Plan immediately and provide copies of the plan to the appropriate parties identified on the distribution list provided in Appendix B.

Thank you for your cooperation in resolving the H<sub>2</sub>S contingency plan. The OCD appreciates all of the time and effort of you and your staff in making the appropriate revisions to the plan. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or [brad.a.jones@state.nm.us](mailto:brad.a.jones@state.nm.us).

***Brad A. Jones***

*Environmental Engineer*

*Environmental Bureau*

*NM Oil Conservation Division*

*1220 S. St. Francis Drive*

*Santa Fe, New Mexico 87505*

*E-mail: [brad.a.jones@state.nm.us](mailto:brad.a.jones@state.nm.us)*

*Office: (505) 476-3487*

*Fax: (505) 476-3462*

STATE OF NEW MEXICO  
**\$50,000 BLANKET PLUGGING BOND**

BOND NO. 6407032

File with the OIL CONSERVATION DIVISION, 1220 South St. Francis, Santa Fe, New Mexico 87505

KNOW ALL MEN BY THESE PRESENTS:

That Targa Midstream Services Limited Partnership, (an individual) (a general partnership) (a corporation, limited liability company or limited partnership organized in the State of Delaware, and authorized to do business in the State of New Mexico), as PRINCIPAL, and Safeco Insurance Company of America, a corporation organized and existing under the laws of the State of Washington and authorized to do business in the State of New Mexico, as SURETY, are firmly bound unto the State of New Mexico for the use and benefit of the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (or successor agency) (the DIVISION) pursuant to NMSA 1978, Section 70-2-14, as amended, in the sum of Fifty Thousand Dollars (\$50,000) for the payment of which the PRINCIPAL and SURETY hereby bind themselves and their successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, the PRINCIPAL has commenced or may commence the drilling of a well or wells to prospect for and/or produce oil or gas, carbon dioxide gas, helium gas or brine minerals on privately owned or state owned lands within the State of New Mexico, or does own or operate, or may acquire, own or operate such a well or such wells, the identification and location of said wells being expressly waived by both PRINCIPAL and SURETY.

NOW, THEREFORE, if the PRINCIPAL and SURETY or either of them or their successors or assigns, or any of them, shall cause all of said wells to be properly plugged and abandoned when dry or when no longer productive or useful for other beneficial purpose, in accordance with the rules and orders of the of DIVISION, including but not limited to Rules 101 [19.15.3.101 NMAC] and 202 [19.15.4.202 NMAC], as such rules now exist or may hereafter be amended;

THEN AND IN THAT EVENT, this obligation shall be null and void; otherwise, and in default of complete compliance with any and all of said obligations, the same shall remain in full force and effect.

PROVIDED HOWEVER, that 30 days after receipt by the DIVISION of written notice of cancellation from the SURETY, the obligation of the SURETY shall terminate as to wells acquired, drilled or started, or of which PRINCIPAL assumes operation, after said 30-day period, but shall continue in effect, notwithstanding said notice, as to wells theretofore acquired, drilled, started or operated.

Targa Midstream Services Limited Partnership  
PRINCIPAL  
1000 Louisiana, Suite 4300  
Houston, Texas 77002  
Address

By *Clark White*  
Signature  
VP & Region Manager  
Title

Safeco Insurance Company of America  
SURETY  
1600 North Collins Blvd., Suite 3000  
Richardson, Texas  
Address

By *Janie Cermeno*  
Attorney - In-Fact  
Janie Cermeno

If PRINCIPAL is a corporation, affix  
corporate seal here.

Corporate surety affix  
corporate seal here.



Bond No. 6407032.



POWER OF ATTORNEY

SAFECO INSURANCE COMPANY OF AMERICA  
GENERAL INSURANCE COMPANY OF AMERICA  
HOME OFFICE: SAFECO PLAZA  
SEATTLE, WASHINGTON 98185

No. 6485

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

\*\*\*PHYLLIS RAMIREZ; JANIE CERMENO; PHILIP N. BAIR; VICIE COLEMAN; JIMMYE LANGFORD; MILDRED L. MASSEY; ERIC S. FBIGHL; JOYCE A. JOHNSON; Houston, Texas\*\*\*\*\*

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 27th day of November, 2002

CHRISTINE MEAD, SECRETARY

MIKE MCGAVICK, PRESIDENT

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

- (i) The provisions of Article V, Section 13 of the By-Laws, and
- (ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
- (iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Christine Mead, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 13th day of February, 2007



CHRISTINE MEAD, SECRETARY



SURETY RIDER

Liberty Mutual Surety  
1001 4th Avenue, Suite 1700  
Seattle, WA 98154

To be attached to and form a part of

Bond No. 6407032

Type of

Bond: Blanket Plugging Bond

dated

effective February 13, 2007  
(MONTH-DAY-YEAR)

executed by Targa Midstream Services Limited Partnership  
(PRINCIPAL)

, as Principal,

and by Safeco Insurance Company of America

, as Surety,

in favor of the State of New Mexico  
(OBLIGEE)

in consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing  
the name of the Principal

From: Targa Midstream Services Limited Partnership

To: Targa Midstream Services LLC

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider

is effective October 5, 2011  
(MONTH-DAY-YEAR)

Signed and Sealed October 5, 2011  
(MONTH-DAY-YEAR)

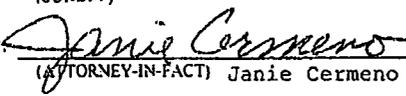
Targa Midstream Services LLC  
(PRINCIPAL)

By: 

(PRINCIPAL)

Safeco Insurance Company of America

(SURETY)

By: 

(ATTORNEY-IN-FACT) Janie Cermeno





POWER OF ATTORNEY

Safeco Insurance Company of America
General Insurance Company of America
1001 4th Avenue
Suite 1700
Seattle, WA 98154

No. 6485

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

\*\*\*PHILIP N. BAIR; JANIE CERMENO; ERIC S. FEIGHL; JOYCE A. JOHNSON; JIMMYE LANGFORD; PHYLLIS RAMIREZ;SHERRY SKINNER; Houston, Texas\*\*\*\*\*

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 21st day of March, 2009

Dexter R. Legg

T. A. Mikolajewski

Dexter R. Legg, Secretary

Timothy A. Mikolajewski, Vice President

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

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(iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Dexter R. Legg, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 5th day of October, 2011



Dexter R. Legg

Dexter R. Legg, Secretary