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Alberto A. Gutiérrez, C.P.C.

May 26, 2017

2017 MAY 30 A 7:54

Mr. David Catanach, Director  
NM Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Via Federal Express and Email

**Re: Request of Targa Midstream Services LLC for Modification of R-13052A, SWD-1654 and SWD1671 to Raise Maximum Injection Rate for Monument AGI System**

Dear Mr. Catanach:

Enclosed, please find five hard bound copies and one electronic copy (on a thumb drive) of the above-referenced application filed on behalf of Targa Midstream Services LLC.

As discussed in my meeting regarding this application with Mr. Phillip Goetze a couple of weeks ago and subsequent emails and conversations, we are submitting this request to modify the injection rate limitation imposed on Targa by R-13052A and carried forward in SWD-1654 and SWD-1671. This request is due to changing inlet concentrations of CO<sub>2</sub> and additional wells being brought online. Targa is not requesting any changes in the approved injection zone or MAOP already approved under Order R-13052 and SWD-1654 and SWD-1671.

We initially made this request to Mr. Goetze to be processed administratively; however, he informed us that you and NMOCD legal determined it would be preferable to bring it to the Commission for review and approval.

Pursuant to Mr. Goetze's request we will individually notice all affected parties in the area of review and will send those individual notices when the hearing date is set. Copies of the notice letters, certified mail receipts will be provided as exhibits to the Commission at the hearing. We would respectfully request a hearing date be set as soon as possible as there are wells shut in that cannot be brought online until this application is approved.

Please call me or James Hunter at 505-842-8000 if you have any questions or require further information.

Sincerely,  
Geolex, Inc.

  
Alberto A. Gutierrez, RG  
President  
Consultant to Targa Midstream Services LLC

cc: Phillip Goetze, via email w/encl. NMOCD, Engineering Bureau  
Clark White, via email w/encl. Targa Midstream Services LLC, Houston  
James Lingnau, via email w/encl. Targa Midstream Services LLC, Monument

Projects/17-012/correspondence/catanach001.ltr.docx

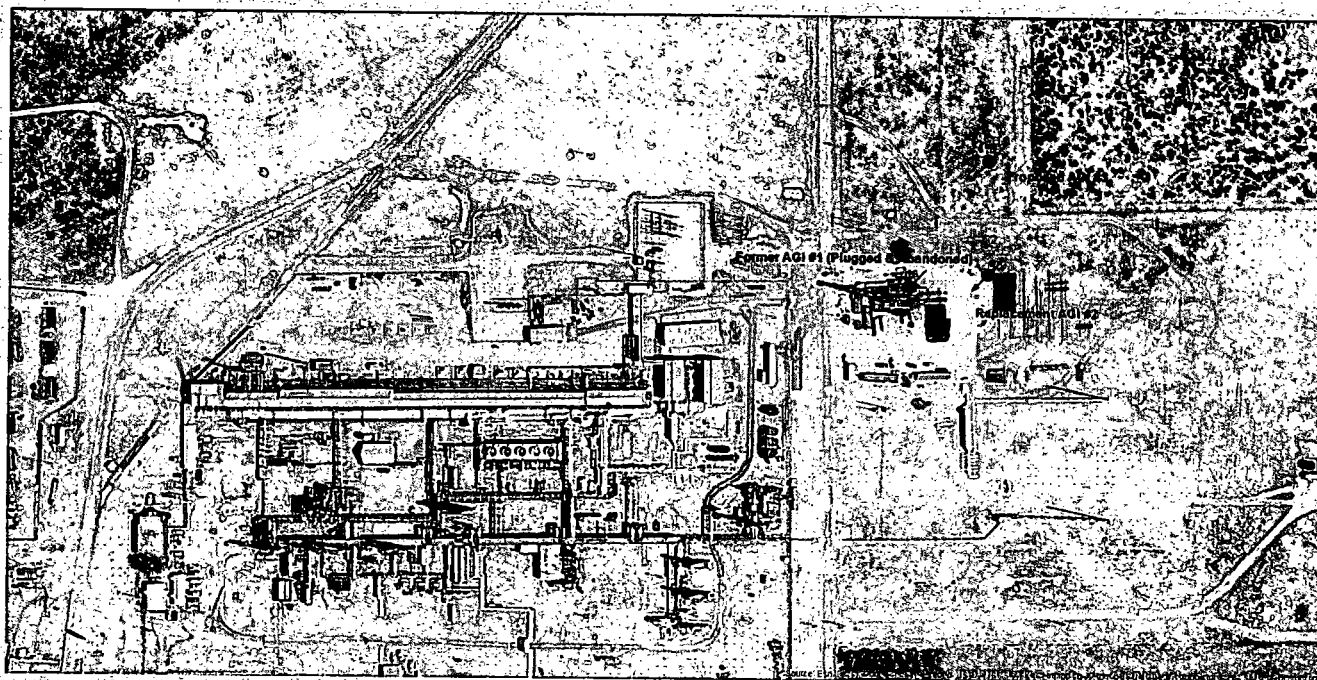
phone: 505-842-8000  
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web: www.geolex.com



**APPLICATION TO THE NMOCC FOR AN AMENDMENT TO  
ORDERS R-13052, R-13052-A, SWD-1654 AND SWD-1671 TO  
INCREASE THE APPROVED AGGREGATE DAILY INJECTION RATE  
FOR TARGA MONUMENT AGI SYSTEM FROM 2.5 TO 5.0 MMSCFD**



**May 25, 2017**

*Prepared For:*

**New Mexico Oil Conservation Commission  
1220 S. St. Francis Drive, Santa Fe, NM 87505**

*Prepared By:*

**Geolex, Inc.  
500 Marquette Avenue, NW #1350  
Albuquerque, New Mexico 87102  
(505)-842-8000**

*Submitted By:*

**Targa Midstream Services LLC  
1000 Louisiana, Suite 4300  
Houston, Texas 77022-5032**

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### Attachments

Attachment A:	Completion and Recompletion Records, J. R. Phillips 005 (3002504134)
Attachment B:	Plugging and Recompletion Records, North Monument G/Sa Unit 286 (3002520517)

**APPLICATION TO THE NMOCC FOR AN AMENDMENT TO ORDERS R-13052, R-13052-A, SWD-1654 AND SWD-1671 TO INCREASE THE APPROVED AGGREGATE DAILY INJECTION RATE FOR TARGA MONUMENT AGI SYSTEM FROM 2.5 TO 5.0 MMSCFD**

**1.0 BACKGROUND AND REGULATORY HISTORY**

On November 18, 2008 the New Mexico Oil Conservation Division (NMOCD) approved the application (Case No. 14161) submitted by Targa Resources Midstream, Ltd. (Targa) to drill and operate an acid gas injection (AGI) well at Targa's Monument natural gas processing plant in Lea County, New Mexico (NMOCC Order R-13052). The Order allowed Targa to inject into the Devonian and Fusselman zones at depths from 8,350 to 9,200 feet, with a maximum allowable operation pressure (MAOP) of 1,660 psig for combined treated acid gases (TAG) and wastewater with no limits on either TAG or wastewater injection rates.

On November 7, 2011 the NMOCC reopened Order R-13052 and in an amended Order (R-13052-A) placed a limit on injection rates to cap the daily total injectate volume at 5,000 barrels per day, with no more than 1,400 barrels to be TAG. Depending on actual wellhead pressures and temperatures, the amount of 1,400 barrels of TAG closely corresponds to approximately 2.5 to 2.7 MMSCFD.

The approved well, Monument AGI #1 (3002540002) began injection in December of 2011 and was operated until August of 2016, when mechanical problems forced the plugging and abandonment of the well.

On October 19, 2016 Targa submitted an application to NMOCD for an administrative authorization to replace Monument AGI #1 with a new dry (TAG only) AGI well (Monument AGI #D2; 3002543470), to be completed adjacent to the former well in the same zone and essentially identical depths. This application was administratively approved as Order SWD-1654 on November 10, 2016. This Order provides an MAOP of 3,000 psig (TAG only), and limited the total injection rate to 2.5 MMSCFD. At this rate of injection, the 30-year radius of influence was calculated to be 0.33 miles.

The well was spudded on November 23, 2016 and after completion and testing was placed into operation on March 23, 2017. The well is now in normal service. In the first quarter of 2017, the average injection rate was 1.54 MMSCFD, at an average pressure of 1,989 psig.

On December 9, 2016 Targa submitted an application (C-108) to the NMOCD requesting administrative approval for an additional, redundant well, Targa Monument AGI #3. The Targa Monument AGI #3 well would be drilled at a surface location approximately 200 feet north of AGI #2D, and will be completed in the same Devonian and Fusselman zones (Figure 1). This application was approved on April 24, 2017 in NMOCD Administrative Order SWD-1671. Again, the maximum injection rate for TAG only was set at 2.5 MMSCFD.

## 2.0 REQUEST FOR ORDER MODIFICATION

Since the replacement well AGI #2D was placed into operation there have been significant increases in CO<sub>2</sub> in the natural gas processed by the Monument gas plant, as well as additional wells added to the inlet feed which will result in a daily amount of TAG up to 5.0 MMSCFD in the very near future. Targa has calculated the impacts of the proposed increase in injection rates, including both the active AGI #D2 and the proposed AGI #3, and has determined that:

1. The radii of the injected areas of 5.0 MMSCFD will only grow to 0.47 miles, versus the plume radius of 0.33 miles calculated for the original rate of 2.5 MMSCFD.
2. These calculated radii are shown for AGI #D2 (Figure 2) and proposed AGI #3 (Figure 2).
3. Table 1 lists all 10 reported wells penetrating the injection zone within one mile of the project. These wells were identified in the applications for AGI #D2 and AGI #3.
4. The applications for AGI #D2 and AGI #3 identified 10 wells within a one-mile radius of the new well that penetrated the injection zone (Table 1). The conditions of these wells were documented and discussed in the AGI #D2 and AGI #3 applications, and Orders SWD-1654 and SWD-1671 were approved in part on the bases of these evaluations. No additional wells inside the one-mile circle have been identified in an updated database search.
5. With respect to AGI #D2, only 3 of these wells (the original AGI #1, State Gas Com 005, and North Monument G/SA Unit 032) were within the 0.33 mile radius of the original calculated TAG plume (2.5 MMSCFD for 30 years). The proposed expansion of the plume to 0.47 miles (5.0 MMSCFD for 30 years) will only encompass one additional well, J.R. Phillips 005 (Figure 2; Table 1).
6. The J.R. Phillips 005 well was spudded in 1947 and produced oil and gas from the Simpson Sand (9,610' to 9,870'). It was recompleted as an Abo gas well in 1998 by back plugging with a CIBP at 7,785' and perforations from 6,968' to 7,145'. A review of well records (Attachment A) indicates that the original 9,941' 5 1/2" production casing in the 7 3/4" borehole was cemented with 1500 sacks. The Halliburton Redbook indicates this geometry would yield an annular volume of 6.15 feet per cubic foot of cement. This would represent approximately 9,225 feet of filled annulus at only 1.0 cubic feet per sack. Clearly, the production casing was cemented to or very close to the surface, and safely protects the zones below the CIBP.
7. Considering the not-yet-drilled AGI #3, the proposed expanded plume of 0.47 miles only includes one additional well, North Monument G/SA Unit 286 (Figure 3; Table 1). The Unit 286 well was a dry hole, and was plugged and abandoned in March 1963. The well was re-entered in August of 1995 to a depth of 3,760 feet as a potential Eunice-Monument zone. The well was not re-completed, and is currently in Temporary Abandoned status. The last MIT was performed in April 2008. Relevant well records are provided as Attachment B.
8. As detailed in Table 1, all of these wells are properly completed and/or plugged and abandoned, and do not pose a hazard for migration of the injected TAG into any other zones.

Targa respectfully requests that Orders R-13052-A, SWD-1654 and SWD-1671 be amended to increase the total maximum injection rate (combined rate of both or either well) from 2.5 to 5.0 MMSCFD. Targa does not request any increase in the current MAOP of 3,000 psig, and will continue to comply with all other conditions of these Orders.

### **3.0 IDENTIFICATION OF INTERESTED PARTIES IN AREA OF REVIEW**

Geolex has reviewed the land status and operators within one-half mile of the currently operating AGI #D2 and the permitted, yet-to-be drilled AGI #3, and two of the three operators identified in the original Order (Apache Corporation and XTO) remain on the list of operators of record. Three additional operators/lease holders, however, are located within the one-half mile radius of the wells. They are Lea Co. New Mexico Exploration and Production, LLC; Jack Huff Energy and Targa Midstream Services, LLC. There are only two operators within the one-half mile radius with wells penetrating the injection zone (Targa and Apache).

Surface owners within the area of review were also identified in Appendix B of the C-108 applications for both wells. These surface owners are identified in Table 2.

All interested parties will be individually noticed when a hearing date is set pursuant to NMOCC requirements.

## TABLES

**TABLE 1: Wells Penetrating Injection Zone within One Mile of the Active Targa AGI #D2 and Proposed Monument AGI #3**

API	OPERATOR	DEPTH	WELLNAME	STATUS	Notes
3002540002	TARGA RESOURCES	9200	MONUMENT AGI #1	Plugged	Pumped cmt 3,500' to surface.
3002512473	APACHE CORP	10255	STATE F GAS COM 005	Active	Plugged back to Eumont/Seven Rivers at 3,400' (in 5 1/2" casing) 9/11/96. CIBP's w/cmt @ 7,800', 6,850', 5,640', 3,420'.
3002512478	APACHE CORP	9822	NORTH MONUMENT G/SA UNIT 032	Plugged	CIBP w/cmt @ 9,475'; squeezed cmt plugs @ 7,590', 7,160', 5,710" CIBP w/cmt @ 4,500'; Spot cmt @ 2,900', 2,345', 1,330', 367 to surface.
3002512481	APACHE CORP	10100	NORTH MONUMENT G/SA UNIT 285	Active	Plugged & abandoned 3/5/59. Spot cmt @ 9,900', 9,755', 6,305', and 5,655' 3,780'. Re-entered and recompleted 3,930' in Eunice Monument 2/14/96; Re-entered and attempted to re-plugged deeper zones per NMOCD Order R-13052 2/2011. Unsuccessful, released rig May 2011. Well returned to production 7/15/11. Requirement to re-plug well rescinded per Order R-13052 (Reopened) 11/17/2011.
3002520517	APACHE CORP	9900	NORTH MONUMENT G/SA UNIT 286	TA	Dry hole; P&A w/spot plugs @ 10,080', 9,790', 9,068', 8,180', 7,865', 6,770', 6,205', 5,642', 5,075', 3,750', 1,450' to surface, 12/28/62. Re-entered 6/7/95 cleaned to 3,760' (Eunice Monument). Not perforated. Status Temporary Abandoned.
3002505780	ATLANTIC RICHFIELD	9900	J R PHILLIPS A 008	Plugged	CIBP w/cmt @ 9,475'; squeezed cmt plugs @ 7,652', 5,742', 4,897', 3,442', 2,097', 880', 81' to surface.
3002523632	ARCO PERMIAN	9650	J R PHILLIPS A 009	Plugged	CIBP's w/cmt @ 9435', 6,620', 6,186', 5,655', 5,255', 5,069'; Cmt plugs @ 3,645', 1,1125', 610', Surface.
3002504134	APACHE CORP	9953	J R PHILLIPS 005	Active	Recompleted 7/12/98; CIBP at 7,785', perforated 6,965' to 7,685'.
3002504136	APACHE CORP	10214	J R PHILLIPS 007	Active	Temp. abandoned 8/6/92, CIBP's w/cmt @ 9,700', 6,700', 6,275', 5,590'. Recompleted in Paddock 5,264' to 5,530' 3/2010
3002505964	CHEVRON U S A INC	9814	J R PHILLIPS 011	Active	Producing in McKee-Ellenburger 9,490' to 9,800'.

Wells highlighted are within the 0.47 mile radius of the proposed 5.0 MMSCFD rate increase which were not within the 0.33 mile radius of the original rate limitation of 2.5 MMSCFD.

Note: The cement and completion status of all of these wells was reviewed in the C-108 applications, resulting in NMOCD Orders SWD-1654 and SWD 1671.



**Table 2: Surface Owners Within One Half Mile of Targa Monument AGI System**

<b>Surface Owner</b>	<b>Legal</b>	<b>Acres</b>
State of New Mexico New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87501	<b><u>T19S-R36E</u></b> Section 25: SE/4, E/2SW/4	240.00
	Section 36: NW/4, S/2NE/4, N/2SE/4, N/2N/2SW/4	360.00
	<b><u>T20S-R36E</u></b> Section 1: Pt. W/2NE/4, Pt. NW/4, SW/4, Pt. SE/4	463.65
DLD Corporation & Any Successors-in Interest/Assignees 1314 Brittany Hobbs, NM 88240	<b><u>T19S-R36E</u></b>  Section 36: S/2N/2SW/4 Parcel #: 4000428830001	40.00
Versado Gas Processors, LLC 1900 Dalrock Rd. Rowlett, TX 75088	<b><u>T19S-R36E</u></b> Section 36: S/2SW/4, SW/4SE/4 Parcel #: 4000423510003	120.00
	<b><u>T20S-R36E</u></b> Section 1: Pt. N/2NE/4NW/4 Parcel #: 4000423510004	18.13
Chevron USA, Inc. P.O. Box 285 Houston, TX 77001	<b><u>T19S-R36E</u></b> Section 36: SE/4SE/4 Parcel #: 4000409030001	40.00
Charlie F. Byrd, et al P.O. Box 32 Monument, NM 88265	<b><u>T19S-R37E</u></b> Section 31: W/2, W/2NE/4, Pt. E/2NE/4 Parcel #: 4000402920004	460.44
	<b><u>T20S-R37E</u></b> Section 6: Lots 3 – 5, SE/4NW/4 Parcel #: 4000402920002	157.77

James R. Byrd P.O. Box 32 Monument, NM 88265	<b><u>T20S-R36E</u></b> Section 1: Pt. NE/4 Parcel #: 4000792560001	33.93
Juan Carlos Martinez 210 W. Chance Dr. Hobbs, NM 88242	<b><u>T20S-R36E</u></b> Section 1: Pt. NW/4 Parcel #: 4000407150001	9.56

## FIGURES

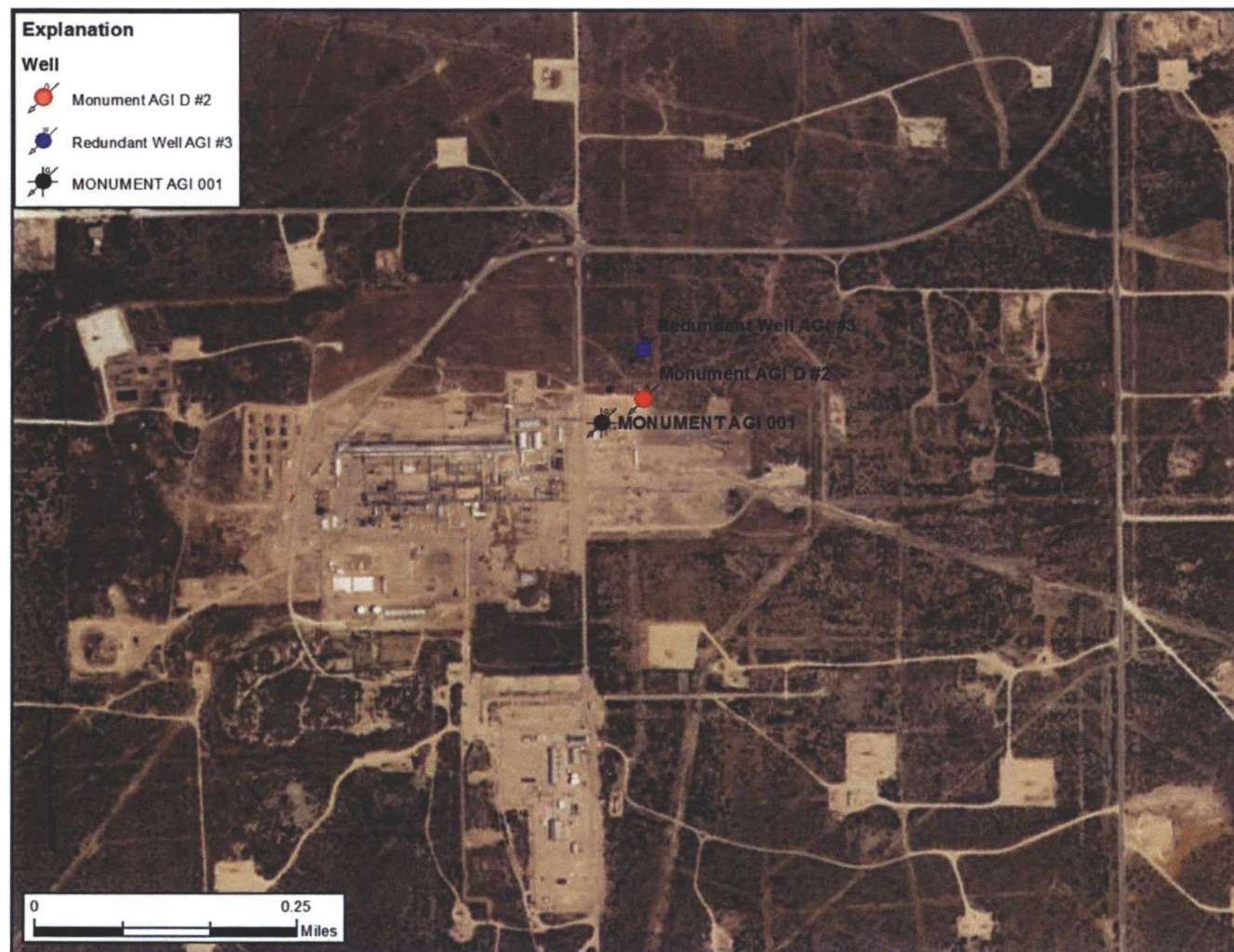


Figure 1: Locations of AGI Wells at Targa Monument Natural Gas Plant

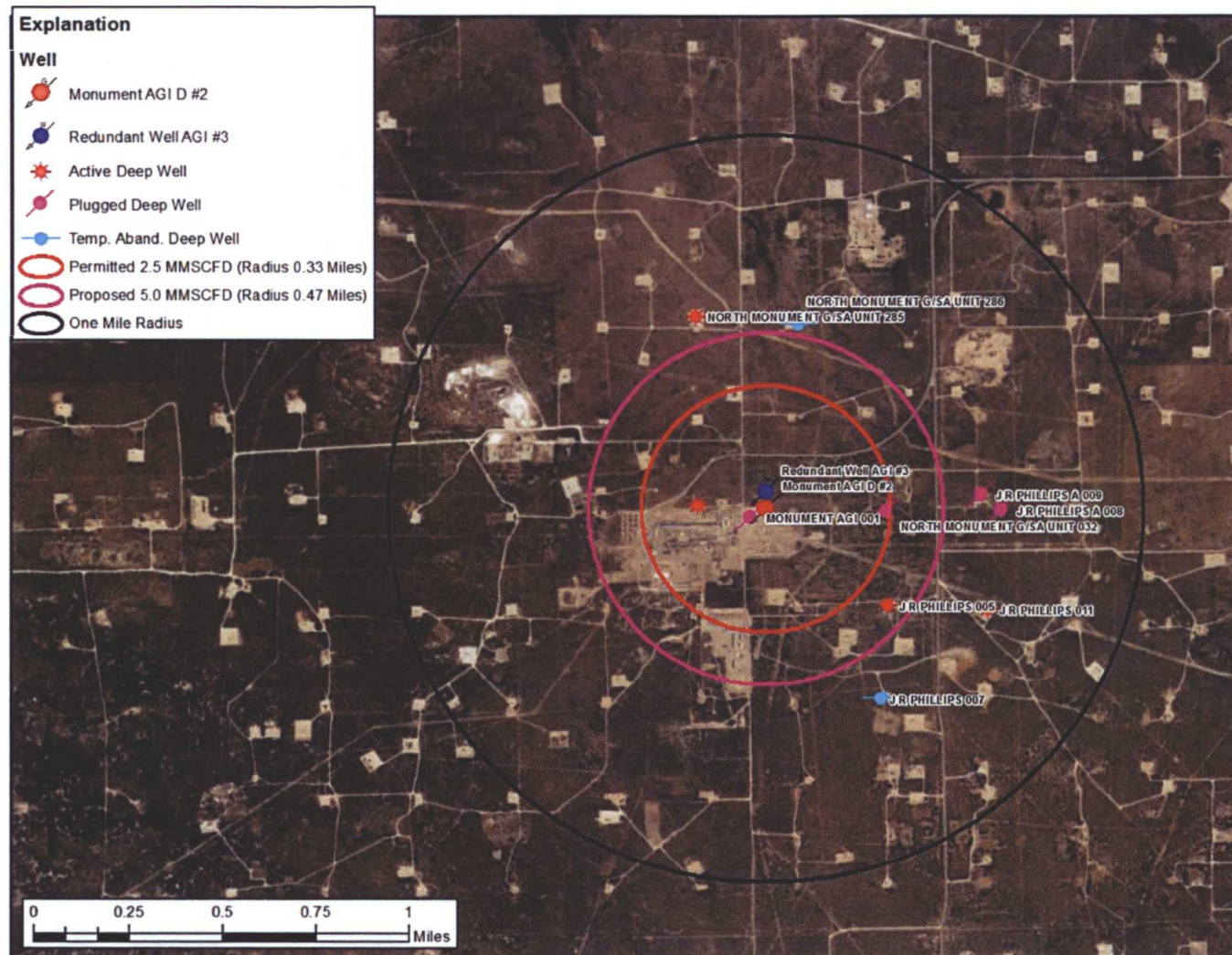


Figure 2: Calculated Radii of TAG Plume From AGI #D2 after 30 Years of Injection at 2.5 MMSCFD (0.33 Miles) and 5.0 MMSCFD (0.47 Miles)



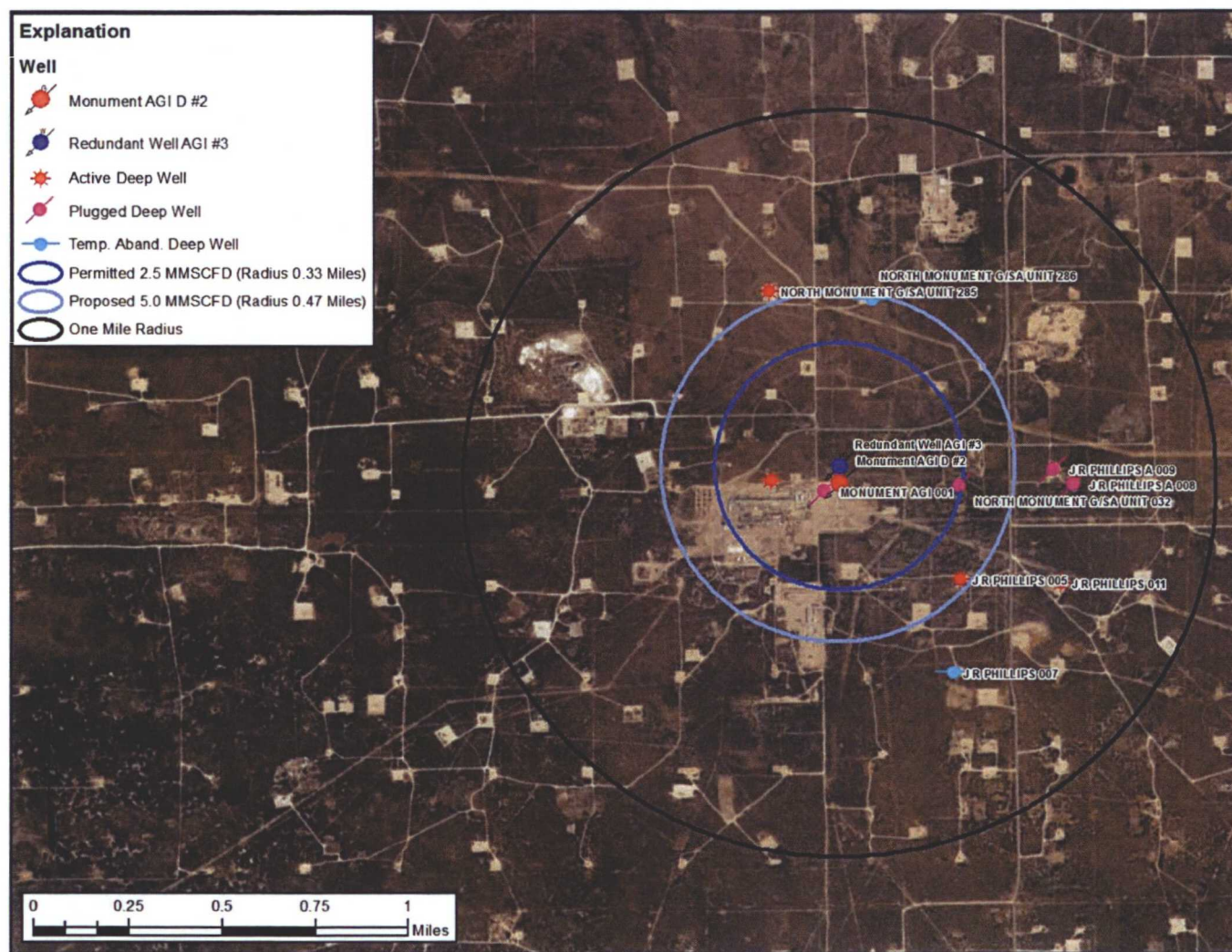


Figure 3: Calculated Radii of TAG Plume From AGI #3 after 30 Years of Injection at 2.5 MMSCFD (0.33 Miles) and 5.0 MMSCFD (0.47 Miles)

**ATTACHMENT A**

**COMPLETION AND RECOMPLETION RECORDS, J. R. PHILLIPS OO5 (API 3002504134)**

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

(Form C-104)  
(Revised 7/1/52)

REQUEST FOR (OIL) - (GAS) ALLOWABLE

RECOMPLETION

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Monument, New Mexico  
(Place)

July 24, 1956  
(Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Amerada Petroleum Corporation J.R. Phillips Well No. 5 in NE 1/4 NE 1/4,  
(Company or Operator) (Lease)  
A Sec. 1 T. 20-S R. 36-E NMPM. Monument, New Mexico Pool  
(Unit)  
Recompleted - July 17, 1956  
Loc. County. Date Completed.

Please indicate location:


R-36-E

Elevation 3576' DP Total Depth 9953' P.B. 9885'

Top oil/gas pay 9610' Name of Prod. Form Simpson Sand

Casing Perforations 9610' to 9700'; 9710' to 9740'; 9750' to 9790' & 9800' to 9870'.

Depth to Casing shoe of Prod. String

Natural Prod. Test BOPD

based on bbls. Oil in Hrs. Mins.

Test after acid or shot BOPD

Based on bbls. Oil in Hrs. Mins.

Gas Well Potential: Calculated Open Flow 26,600,000 cu. ft. of gas per day, with 63 bbls. of 63.9 gravity distillate.  
Size choke in inches.

Date first oil run to tanks or gas to Transmission system July 17, 1956

Gas - Permian Basin Pipe Line Company

Transporter taking Oil or Gas: Oil - Texas-New Mexico Pipe Line Company

Remarks: After perforating, ran tubing, opened well & started flowing naturally.

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

Approved 1956, 19

Amerada Petroleum Corporation  
(Company or Operator)

OIL CONSERVATION COMMISSION

By: (Signature)  
(Signature)

By: (Signature)

Title Foreman

Send Communications regarding well to:

Title

Name Amerada Petroleum Corporation

Monument, New Mexico



Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

**DISTRICT I**

P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**

P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**

2040 Pacheco St.  
Santa Fe, NM 87505

Form C-105  
Revised 1-1-89

WELL API NO.

30-025-04134

5. Indicate Type Of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. Type of Well:

OIL WELL ☒

GAS WELL ☐

DRY ☐

OTHER ☐

b. Type of Completion:

NEW  
WELL ☐

WORK  
OVER ☐

DEEPEN ☐

PLUG  
BACK ☒

DIFF  
RESVR ☐

OTHER ☐

7. Lease Name or Unit Agreement Name

J. R. Phillips

8. Well No.

5

9. Pool name or Wildcat

Monument Abo

2. Name of Operator

Amerada Hess Corporation

3. Address of Operator

P.O. Box 840 Seminole, TX 79360

4. Well Location

Unit Letter A : 660 Feet From The North Line and 660 Feet From The East Line

Section 1

Township 20S

Range 36E

NMPM

Lea

County

10. Date Spudded

5-8-47

11. Date T.D. Reached

12. Date Compl.(Ready to Prod.)

7-12-98

13. Elevations(DF & RKB, RT, GR, etc.)

3587' DF

14. Elev. Casinghead

15. Total Depth

9953'

16. Plug Back T.D.

7785'

17. If Multiple Compl. How  
Many Zones?

18. Intervals  
Drilled By

1 Rotary Tools

1 Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name

6968' - 7685' Monument Abo

20. Was Directional Survey Made

21. Type Electric and Other Logs Run

VSI/CCL/GR

22. Was Well Cored

**CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
16"	65#	169'	24"	Csq. ran in	well in 1947.
11-3/4"	60#	2419'	15"	Csq. ran in	well in 1947.
8-5/8"		5121'	10-5/8"	Csq. ran in	well in 1947.
5-1/2"	17#	9941'	7-3/4"	Csq. ran in	well in 1947.

**24. LINER RECORD**

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

**25. TUBING RECORD**

SIZE	DEPTH SET	PACKER SET
2-7/8"	7443'	

26. Perforation record (interval, size, and number)

Perf. 5-1/2" csg. using 4" Hogs csg. gun w/4 SPF at  
following: 6968'-6971', 6979'-6982', 6989'-6992',  
7000'-7060', 7070'-7145' CONTINUED OVER

**27. ACID, SHOT, FRACTURE, CEMENT, SOEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
7785'	Set 5-1/2" CIBP.
6968'-7685'	Acidized w/19 600 gal. 15% HCL.
5159'-5191'	Pumped 100 sks premium plus

**28. PRODUCTION**

Date First Production

6-9-98

Production Method (Flowing, gas lift, pumping - Size and type pump)

Pumping: 25-125-RHBC-20-6-5-2

Well Status (Prod. or Shut-in)

Producing

Date of Test

7-19-98

Hours Tested

24 Hours

Choke Size

Prod'n For

Test Period

Oil - Bbl.

26

Gas - MCF

191

Water - Bbl.

73

Gas - Oil Ratio

7346

Flow Tubing Press.

280

Casing Pressure

20

Calculated 24-

Hour Rate

Oil - Bbl.

Gas - MCF

Water - Bbl.

Oil Gravity - API (Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

Test Witnessed By

30. List Attachments

C-103, C-104

31. 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

Printed  
Name

R. L. Wheeler, Jr.

Title Admin. Svc. Coord. Date 7-23-98

# INSTRUCTIONS

This 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 deepened well. It 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 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

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

### Southeastern New Mexico

T. Anhy \_\_\_\_\_ Please refer  
T. Salt \_\_\_\_\_ original well  
B. Salt \_\_\_\_\_ completion.  
T. Yates \_\_\_\_\_  
T. 7 Rivers \_\_\_\_\_  
T. Queen \_\_\_\_\_  
T. Grayburg \_\_\_\_\_  
T. San Andres \_\_\_\_\_  
T. Glorieta \_\_\_\_\_  
T. Paddock \_\_\_\_\_  
T. Blinbry \_\_\_\_\_  
T. Tubb \_\_\_\_\_  
T. Drinkard \_\_\_\_\_  
T. Abo \_\_\_\_\_  
T. Wolfcamp \_\_\_\_\_  
T. Penn \_\_\_\_\_  
T. Cisco (Bough C) \_\_\_\_\_

T. Canyon \_\_\_\_\_  
T. Strawn \_\_\_\_\_  
T. Atoka \_\_\_\_\_  
T. Miss \_\_\_\_\_  
T. Devonian \_\_\_\_\_  
T. Silurian \_\_\_\_\_  
T. Montoya \_\_\_\_\_  
T. Simpson \_\_\_\_\_  
T. McKee \_\_\_\_\_  
T. Ellenburger \_\_\_\_\_  
T. Gr. Wash \_\_\_\_\_  
T. Delaware Sand \_\_\_\_\_  
T. Bone Springs \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_

### Northeastern New Mexico

T. Ojo Alamo \_\_\_\_\_  
T. Kirtland-Fruitland \_\_\_\_\_  
T. Pictured Cliffs \_\_\_\_\_  
T. Cliff House \_\_\_\_\_  
T. Menefee \_\_\_\_\_  
T. Point Lookout \_\_\_\_\_  
T. Mancos \_\_\_\_\_  
T. Gallup \_\_\_\_\_  
Base Greenhorn \_\_\_\_\_  
T. Dakota \_\_\_\_\_  
T. Morrison \_\_\_\_\_  
T. Todilto \_\_\_\_\_  
T. Entrada \_\_\_\_\_  
T. Wingate \_\_\_\_\_  
T. Chinle \_\_\_\_\_  
T. Permian \_\_\_\_\_  
T. Penn "A" \_\_\_\_\_

T. Penn. "B" \_\_\_\_\_  
T. Penn. "C" \_\_\_\_\_  
T. Penn. "D" \_\_\_\_\_  
T. Leadville \_\_\_\_\_  
T. Madison \_\_\_\_\_  
T. Elbert \_\_\_\_\_  
T. McCracken \_\_\_\_\_  
T. Ignacio Otzte \_\_\_\_\_  
T. Granite \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_  
T. \_\_\_\_\_

### OIL OR GAS SANDS OR ZONES

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 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
			Please refer original well completion.				
			26. Perforations Cont.				
			7155' - 7260' . 7335' - 7345' .				
			7370' - 7380' . 7440' - 7455' .				
			7475' - 7515' . 7540' - 7560' .				
			7590' - 7600' . & 7650' - 7685' .				



Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

**DISTRICT I**  
P.O. Box 1980, Hobbs NM 88241-1980

**DISTRICT II**  
P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**OIL CONSERVATION DIVISION**

2040 Pacheco St.  
Santa Fe, NM 87505

<b>WELL API NO.</b>	<b>30-025-04134</b>
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 <b>J. R. Phillips</b>	
8. Well No.	<b>5</b>
9. Pool name or Wildcat Monument Abo	

<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.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	
2. Name of Operator <b>Amerada Hess Corporation</b>	
3. Address of Operator <b>P. O. Box 840, Seminole, Texas 79360</b>	
4. Well Location Unit Letter <b>A</b> : <b>660</b> Feet From The <b>North</b> Line and <b>660</b> Feet From The <b>East</b> Line Section <b>1</b> Township <b>20S</b> Range <b>36E</b> NMPM <b>Lea</b> County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) <b>3587' DF</b>	

<b>11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data</b>	
<b>NOTICE OF INTENTION TO:</b>	<b>SUBSEQUENT REPORT OF:</b>
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <u>Recompletion.</u> <input checked="" type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

6-1 thru 7-12-98

MIRU Dawson Prod. Svc. pulling Unit. Removed wellhead, installed BOP & TOH w/tbg. & pkr. TIH w/4.34" gauge ring to 7830' & TOH. TIH w/5-1/2" CIBP set at 7785'. Circ. tbg. & csg. w/KCL water & press. tested csg. to 500 PSI. Held OK. Schlumberger ran VSI/CCL/GR log. Schlumberger perf. 5-1/2" csg. in Abo Zone using 4" Hags csg. gun w/4 SPF, total 1569 shots. at following intervals: 6968' - 6971', 6979' - 6982', 6989' - 6992', 7000' - 7060', 7070' - 7145', 7155' - 7260', 7335' - 7345', 7370' - 7380', 7440' - 7455', 7475' - 7515', 7540' - 7560', 7590' - 7600' & fr. 7650' - 7685'. American Fracmaster acidized Abo Zone 5-1/2" csg. perfs. fr. 6968' - 7685' w/19,600 gal. 15% HCL acid. Swabbed & flowed well. GPM connected gas Meter No. 711202 & began taking gas on 6-12-98. CONTINUED OVER

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

SIGNATURE Roy L. Wheeler, Jr. TITLE Admin. Svc. Coord. DATE 7-23-98

TYPE OR PRINT NAME Roy L. Wheeler, Jr. TELEPHONE NO. 915 758-6700

(This space for State Use)

ORIGINAL SIGNATURE OF ROY L. WHEELER

APPROVED BY DISTRICT SUPERVISOR TITLE SEP 03 1998 DATE

CONDITIONS OF APPROVAL, IF ANY:

TIH w/TAC on 2-7/8" tbg. & set tbg. OE at 7747'. Swabbed well. TIH w/pump & rods. could not get below 6888'. TOH w/rods, pump, & tbg. TIH w/4-3/4" csg. swedge to 7785' & TOH. TIH w/pkr. testing at intervals & located csg. leak between 5159' - 5191'. TIH w/5-1/2" Md. "G" Baker RBP set at 6325'. Spotted 2 sks. sand on top RBP. TIH w/5-1/2" cement retainer set at 5061'. Halliburton Svc. pumped 100 sks. premium plus neat cement. WOC. TIH w/4-3/4" bit. tagged TOC at 5056' & drld. cement. retainer fr. 5061' - 5063' & cement out at 5207'. Circ. well clean. TIH. circ. sand off RBP at 6325'. latched onto & TOH w/RBP. TIH w/5-1/2" Baker TAC on 2-7/8" tbg. & set tbg. at 7443' w/TAC at 6912'. Removed BOP & installed wellhead. TIH w/pump & rods. RDPU & cleaned location. Set pumping unit & motor. Connected electrical svc. & began pumping well on 7-12-98.

Test of 7-19-98: Produced 26 B.O./D., 73 B.W./D., & 191 MCFGPD in 24 hours.

**ATTACHMENT B**

**PLUGGING AND RECOMPLETION RECORDS, NORTH MONUMENT G/SA UNIT 286  
(3002520517)**

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103  
(Rev 3-55)

## MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company <b>Amerada Petroleum Corporation</b>		Address <b>P. O. Box 668 - Hobbs, New Mexico</b>				
Lease <b>State NYN</b>	Well No. <b>5</b>	Unit Letter <b>Q</b>	Section <b>36</b>	Township <b>19-3</b>	Range <b>36-E</b>	
Date Work Performed	Pool <b>Monument - McKee</b>	County <b>Lea</b>				

THIS IS A REPORT OF: (Check appropriate block)

- ☐ Beginning Drilling Operations
 ☐ Casing Test and Cement Job
 ☐ Other (Explain):  
☒ Plugging
 ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Permission to perform the following work was obtained from Mr. E. Engbrecht by telephone 2-27-63.

10,306' total depth - Dry hole. Cement plugs spotted as follows: 25 sack Trinity also set cement plugs from 10,080' to 10,190'; 9790' to 9900'; 9068' to 9170'; 8180' to 8290'; 7865' to 7975'; 6770' to 6880'; 6205' to 6315'; 5642' to 5752'; 5075' to 5185'; and 1-35 sack cement plug from 3750' to 3840' and in 7-5/8" casing from 3688' to 3750'. Left all 10-3/4" and 7-5/8" OD casing in hole. Filled hole with mud and installed 6" Ser. 600 bonnet and valve on well head.

Well Temporarily abandoned 3-1-63. Plan to hold for possible future use as a salt water disposal well.

Witnessed by <b>I. W. Wiseman</b>	Position <b>Foreman</b>	Company <b>Amerada Petroleum Corporation</b>
--------------------------------------	----------------------------	---

### FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

#### ORIGINAL WELL DATA

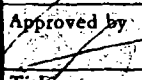
D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval			Producing Formation(s)	

#### RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

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

Approved by 	Name <b>District Superintendent</b>
Title <b>District Superintendent</b>	Position <b>District Superintendent</b>
Date	Company <b>Amerada Petroleum Corporation</b>

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

DISTRICT I  
P.O. Box 1980, Hobbs NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL API NO.	30-025-20517
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	B-1626
7. Lease Name or Unit Agreement Name	
STATE "V"	
8. Well No.	5
9. Pool name or Wildcat	EUNICE MONUMENT GB/SA
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

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 P & A'd

2. Name of Operator  
Amerada Hess Corporation

3. Address of Operator  
P. O. Drawer D, Monument, NM 88265

4. Well Location  
Unit Letter G : 1980 Feet From The NORTH Line and 1830 Feet From The EAST Line  
Section 36 Township 19S Range 36E NMPM LEA County

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐  
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
OTHER: Status chg. fr. PA'd to TA'd. ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

AHC State "V" #5 (08-07-95 Thru 08-11-95)

Tyler Well Service RUPU. Halliburton Svc. tapped the 2" bull plug on surface csg. Recorded the press. at 600 psi. Bled the press. off to reverse pit in 1 min. Install BOP on 10" surf. csg. flange. Ran bit on drill collars & drilled solid cmt. fr. the surf. to 150'. Fell free & ran drill collars for a total of 8 drill collars. Ran tbgs. & tagged up at 722'. Circ. clean. Star Tool drld. out plug to 722'. Drld. & cleaned out 7-5/8" prod. csg. to 3,136'. Recovered heavy mud & emulsion. Circ. clean. Drld. out & circ. 7-5/8" csg. clean fr. 3,136'-3,688'. Recovered heavy mud. Tst'd csg. to 540 psi. Held OK. Pulled & laid dwn. tbgs., drill collars and bit. Schlumberger RU & ran PAL fr. 3,670' to surf. Csg. good. Ran cmt. bond log fr. 3,670' to surf. Found TOC at 1,750'. Have free pipe fr. there to surf. Note: Well passed the csg. integrity (Continued On Back)

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

SIGNATURE Terry L. Harvey TITLE Sr. Staff Assistant DATE 09-18-95  
TYPE OR PRINT NAME Terry L. Harvey TELEPHONE NO. 505 393-2144

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE OCT 02 1995

CONDITIONS OF APPROVAL, IF ANY  
Approval of Temporary Abandonment Expires 9-15-98

test. Schlumberger shot 4 holes in 7-5/8" prod. csg. at 1,510'. Ran Baker loc-set pkr. & set at 1,384'. Star Tool circ. 100 bbls. fresh water through 7-5/8" csg. perfs. & out 10-3/4" surf. csg. at 4 BPM & 200 psi. TOH w/tbg. & pkr. Ran cmt. retainer on tbg. Pumped through tool w/10 bbls. fresh water & set at 1,450'. Halliburton pressured up on the csg. to 500 psi. Established rate into the perfs. at 3 BPM at 200 psi. Pumped 400 sacks of Premium Plus cmt. w/2% Calcium Chloride. Circ. out 10-3/4" surf. csg., pumped 4 sks. to pit, left 4 sks. on top of the retainer, left 12 sks. below the retainer & 380 sks. in the formation & between the 7-5/8" & 10-3/4" csg. Stung out of the retainer & reversed out. TOH w/the tbg. Removed the BOP & capped the wellhead. Cleaned location and RD & moved out pulling unit. TA'd well. Well donated to unit as NMGSAU Well No. 1423. NMOCD Well No. 286. Well TA'd for future use in North Monument Grayburg San Andres Unit.



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

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

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

WELL API NO.	30-025-20517
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	BO-1626
7. Lease Name or Unit Agreement Name	North Monument G/SA Unit: Blk 14 Well 23
8. Well Number	286
9. OGRID Number	00873
10. Pool name or Wildcat	Eunice Monument; Grayburg-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 <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator	Apache Corporation
3. Address of Operator	6120 S Yale Ave, Suite 1500 Tulsa, OK 74136-4224
4. Well Location	Unit Letter G 1980 feet from the North line and 1830 feet from the East line Section 36 Township 19S Range 36E NMPM County Lea
11. Elevation (Show whether DR, RKB, RT, GR, etc.)	3603' DF
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type	Depth to Groundwater
Distance from nearest fresh water well	Distance from nearest surface water
Pit Liner Thickness:	Below-Grade Tank: Volume
	bbls; Construction Material

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 ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐  
OTHER: Request extension to TA status ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Notified OCD of MIT. Successfully ran MIT 3/25/2008. See attached chart.

Apache respectfully requests to extend TA status on this well.

RECEIVED

APR 11 2008

HOBBS OCD

This Approval of Temporary  
Abandonment Expires 4/16/2013.

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

SIGNATURE Sophie Mackay TITLE Engineering Tech DATE 04/04/2008

Type or print name Sophie Mackay

E-mail address: sophie.mackay@apachecorp.com Telephone No. (918)491-4864

For State Use Only

APPROVED BY: Chris Williams TITLE OC DISTRICT SUPERVISOR/GENERAL MANAGER

Conditions of Approval (if any):

DATE APR 16 2008