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OCT 08 2008

OCD-FOOTIS

AT-08-889  
EA-08-1381Form 3160-3  
(August 2007)

HOBBS OIL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. <b>871184</b> <b>LC058626A</b>	
1b Type of Well. <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name N/A	
2 Name of Operator <b>Targa Midstream Services Limited Partnership</b>		7 If Unit or CA Agreement, Name and No N/A	
3a Address <b>1000 Louisiana, Ste 4300</b> <b>Houston, TX 77002-5036</b>		8 Lease Name and Well No <b>&lt;37449&gt;</b> <b>Versado "AGI" #1</b>	
3b Phone No. (include area code) <b>713-584-1000</b>		9 API Well No. <b>30-025-39254</b>	
4 Location of Well (Report location clearly and in accordance with any State requirements*) At surface <b>2250' FSL &amp; 1200' FWL</b> At proposed prod zone <b>Same</b>		10 Pool, or Exploratory <b>AGI</b> <b>SAN ANDRES</b> <b>&lt;91674&gt;</b>	
11 Sec., T. R. M. or Blk. and Survey or Area <b>Sec 27 T22S R37E</b>		12 County or Parish <b>Lea</b>	
13 State <b>NM</b>		14 Distance in miles and direction from nearest town or post office* <b>6 miles SE of Eunice, NM</b>	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) <b>1000' FSL of property</b>		16 No. of acres in lease <b>93.6</b>	
17 Spacing Unit dedicated to this well <b>Unit L</b>		18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft (to be plugged) <b>300'</b>	
19 Proposed Depth <b>5000'</b>		20 BLM/BIA Bond No on file <b>6407032 NMB 000545</b>	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3334' GL</b>		22 Approximate date work will start* <b>August 1, 2008</b>	
23 Estimated duration <b>3 weeks</b>		24 Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form

- |  |  |
|--|--|
| 1 Well plat certified by a registered surveyor   | 4 Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2 A Drilling Plan.   | 5 Operator certification   |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM.             |

25 Signature <b>Clark White</b>	Name (Printed/Typed) <b>Clark White</b>	Date <b>7/10/08</b>
Title <b>VP &amp; Region Manager Targa Midstream Services Limited Partnership</b>		
Approved by (Signature) <b>/s/ Don Peterson</b>	Name (Printed/Typed) <b>/s/ Don Peterson</b>	Date <b>OCT 03 2008</b>
Title <b>FIELD MANAGER</b>	Office <b>CARLSBAD FIELD OFFICE</b>	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon  
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

R-12809-B **<injection>**  
Capitan Controlled Water Basin

\*(Instructions on page 2)

KZ

SEE ATTACHED FOR  
CONDITIONS OF APPROVALApproval Subject to General Requirements  
& Special Stipulations Attached



TARGA

Targa Midstream Services Limited  
Partnership  
1000 Louisiana, Suite 4300  
Houston, Texas 77002  
432 688 0550 (direct)  
[CWhite@targaresources.com](mailto:CWhite@targaresources.com)

RECEIVED

OCT 08 2008

July 18, 2008

HOBBS (11) *UPS OVERNIGHT*  
Via Facsimile

RECEIVED  
JUL 22 AM 8:54  
BUREAU OF LAND MGMT  
OFFICE

BLM  
Carlsbad Field Office  
620 E. Greene Street  
Carlsbad, NM 88220-6292

Re: Targa Midstream Services Limited Partnership Application for Permit to Drill  
the Versado "AGI" #1 Disposal Well

Dear Sirs:

Please accept this letter as certification that Targa Midstream Services Limited Partnership, as operator for Versado Gas Processors L.L.C. is the surface owner for the location of permit application to drill the Versado "AGI" #1 disposal well. We own 93 acres of surface land of which the BLM has a mineral interest underneath a small portion of this site.

Sincerely,

Clark White  
Vice President & Region Manager

Targa Midstream Services Limited Partnership,  
Operator of Versado Gas Processors, L.L.C.

# RECEIVED

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-39254</b>	Pool Code <b>97674</b>	Pool Name <b>AGI; San Andres</b>
Property Code <b>37449</b>	Property Name <b>VERSADO "AGI"</b>	Well Number <b>1</b>
OGRID No. <b>24650</b>	Operator Name <b>TARGA RESOURCES</b>	Elevation <b>3334'</b>

### Surface Location

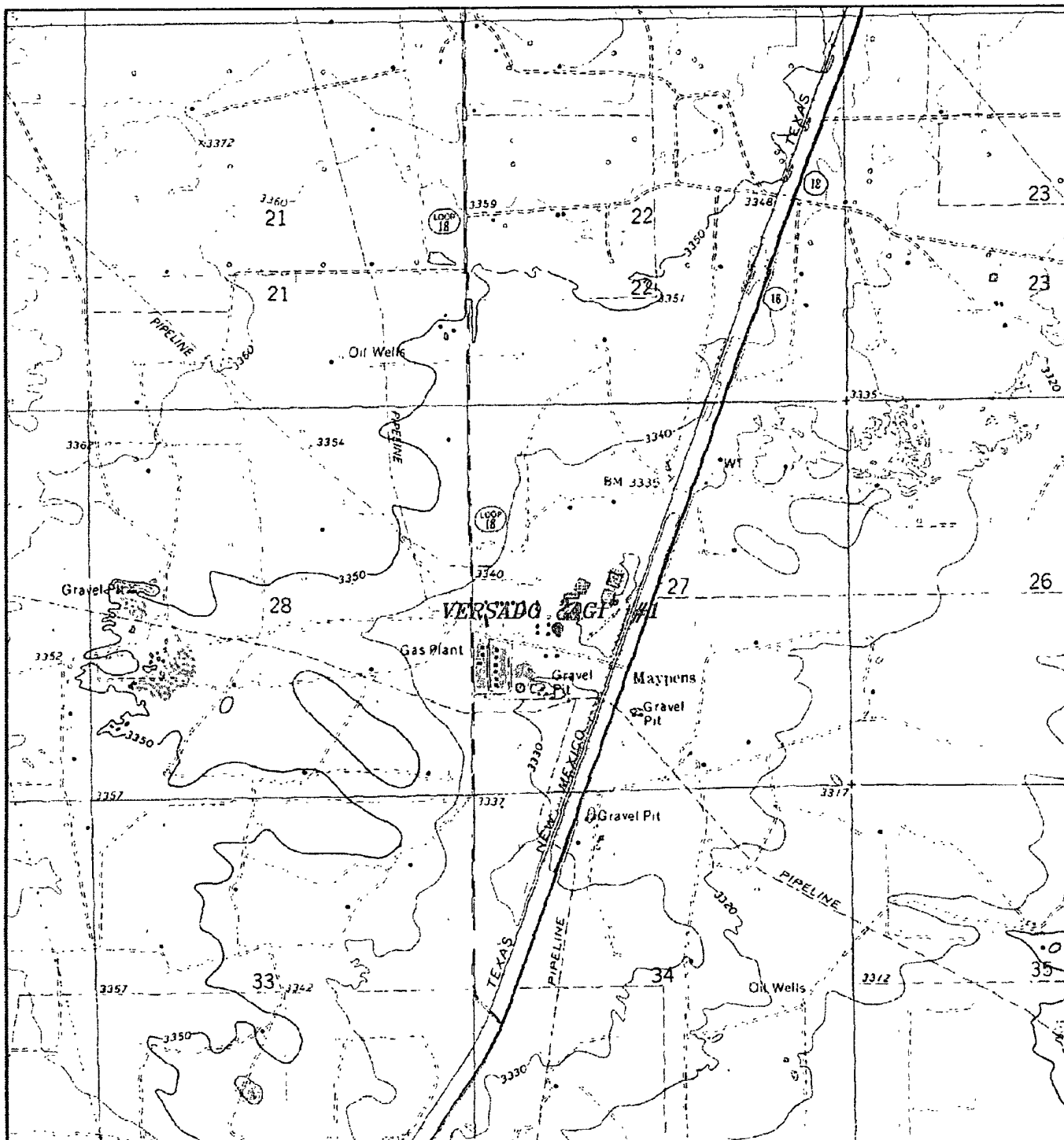
UL or lot No. <b>L</b>	Section <b>27</b>	Township <b>22 S</b>	Range <b>37 E</b>	Lot Idn	Feet from the <b>2250</b>	North/South line <b>SOUTH</b>	Feet from the <b>1200</b>	East/West line <b>WEST</b>	County <b>LEA</b>
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### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>40</b>	Joint or Infill	Consolidation Code	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

	<b>OPERATOR CERTIFICATION</b>  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 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.   Signature 7/18/08 Date  Clark White Printed Name	
	<b>SURVEYOR CERTIFICATION</b>  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.  JUNE 18, 2008 Date Surveyed  Signature Professional Surveyor 7977 W.O. 8866 Certificate No. Gary L. Jones 7977 BASIN SURVEYS	



# VERSADO "AGI" #1

Located at 2250' FSL & 1200' FWL  
 Section 27, Township 22 South, Range 37 East,  
 N.M.P.M., Lea County, New Mexico.

Exhibit A

**TARGA  
 RESOURCES**

**basin  
 surveys**  
 focused on excellence  
 in the oilfield

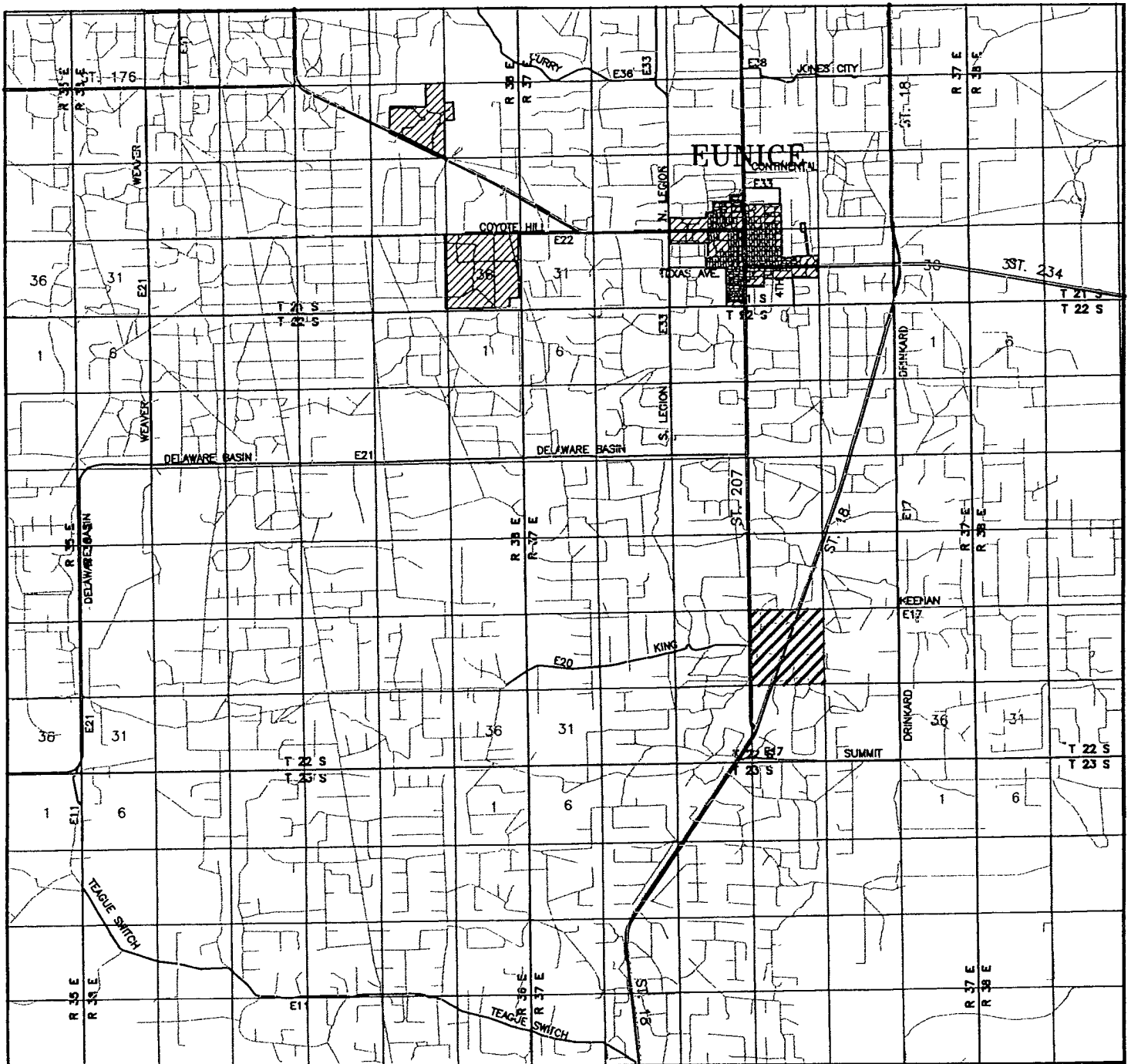
P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 19896

Survey Date: 06-10-2008

Scale: 1" = 2000'

Date: 06-13-2008



VERSADO "AGI" #1

Located at 2250' FSL & 1200' FWL  
Section 27, Township 22 South, Range 37 East,  
N.M.P.M., Lea County, New Mexico.

*Exhibit A-1*

**basin  
surveys**  
focused on excellence  
in the oilfield

P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

W.O. Number: JMS 19896

Survey Date: 06-10-2008

Scale: 1" = 2 MILES

Date: 06-13-2008

**TARGA  
RESOURCES**

SECTION 27, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



150' NORTH  
OFF SET ☐  
3333.4'  
☐

**TARGA RESOURCES**  
**VERSADO "AGI" #1**  
**ELEV. - 3334'**

150' WEST  
OFF SET ☐  
3333.7'

☐

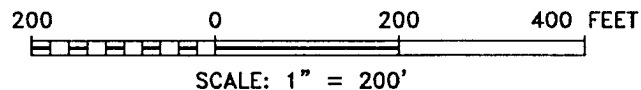
150' EAST  
☐ OFF SET  
3332.9'

LAT. N: 32°21'42.54"  
LONG. W: 103°09'19.89"  
(NAD-83)

☐

150' SOUTH  
OFF SET  
3333.6'

Exhibit A-2



**TARGA RESOURCES**

REF: VERSADO "AGI" #1 / Well Pad Topo

VERSADO "AGI" #1 LOCATED 2250' FROM  
THE SOUTH LINE AND 1200' FROM THE WEST LINE OF  
SECTION 27, TOWNSHIP 22 SOUTH, RANGE 37 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 19896

Drawn By: J. M. SMALL

Date: 06-13-2008

Disk: JMS 19896

Survey Date: 06-10-2008

Sheet 1 of 1 Sheets

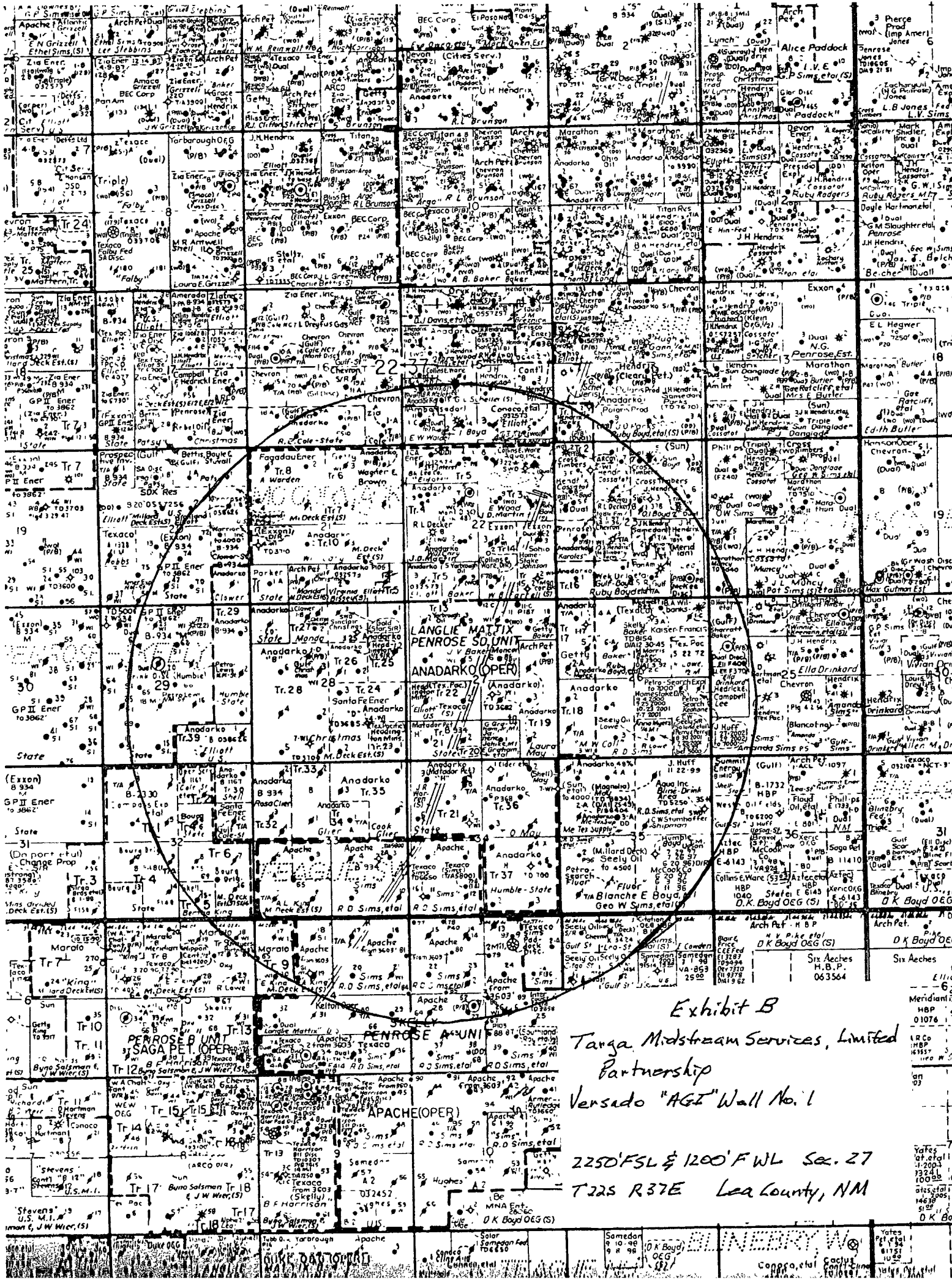


Exhibit B

Tanga Midstream Services, Limited Partnership  
Versado "AGI" Well No. 1

2250' FSL & 1200' FWL Sec. 27

T225 R37E Leona County, NM

LINEBERRY, W

# APPLICATION FOR DRILLING

## TARGA MIDSTREAM SERVICES LIMITED PARTNERSHIP

Versado "AGI" Well No. 1  
2250' FSL & 1,200' FWL, Section 27, T-22-S, R-37-E  
Lea County, New Mexico  
Lease No.: 871184  
(Disposal Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Targa Midstream Services Limited Partnership submits the following items of pertinent information in accordance with BLM requirements:

- The estimated tops of geologic markers are as follows:

	<u>Vertical Depth</u>
Anhydrite	1,138'
Top Salt	1,226'
Base Salt	2,611'
Yates	2,661'
Queen	2,880'
Grayburg	3,416'
Top San Andres	3,962'
Base San Andres	4,950'

- The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 40' – 250'.  
Oil: None expected.  
Gas: None expected. To be drilled as a disposal well.

- Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	COLLAPSE DESIGN FACTOR	BURST DESIGN FACTOR	TENSION DESIGN FACTOR
17 1/2"	13 3/8"	48.0#	H-40	ST & C	45'	Conductor	Casing	-
12 1/4"	9 5/8"	36.0#	J-55	LT & C	1,150'	3.5	6.1	10.9
8 3/4"	7"	23.0#	J-55	LT & C	5,000'	1.31	1.7	2.7

- Cement Program:

HOLE SIZE	SETTING DEPTH	QUANTITY OF CEMENT	YIELD
17 1/2"	45'	Conductor casing. Will be cemented w/ redi-mix. Cemented to surface.	-
12 1/4"	1,150'	500 sx Cl. "C" w/ 2% CaCl to surface.	1.32
8 3/4"	5,000'	350 sx Cl. "C" 50/50 Poz, 10% gel & 180 sx Cl. "C" 50/50 Poz, 2% gel. Cemented to surface. ← See COA	2.54 & 1.28

- Proposed Control Equipment: An 11"-3,000# annular preventer and 11"-3,000# double ram BOP will be installed on the 9 5/8" casing. Equipment will be tested to 2,500 psi. 9 5/8" casing will be tested to 1,500# prior to drilling out cement.

↑  
See COA



6. Mud Program:

Depth				MUD WEIGHT	VIS.	W/L CONTROL
0'	-	1,150'	Fresh water mud:	8.6 – 9.0 ppg	32 – 34	No W/L control. Spud mud
1,150'	-	5,000'	Brine water mud:	10.0 – 10.1 ppg	28 – 29	No W/L control

7. Auxiliary Equipment: Blowout Preventor, gas detector, Kelly cock, and stabbing valve. Well will be drilled with a closed loop circulating system. There will not be any reserve pits.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: No DST's planned.  
 Logging: No open hole logs planned.  
 Coring: None planned

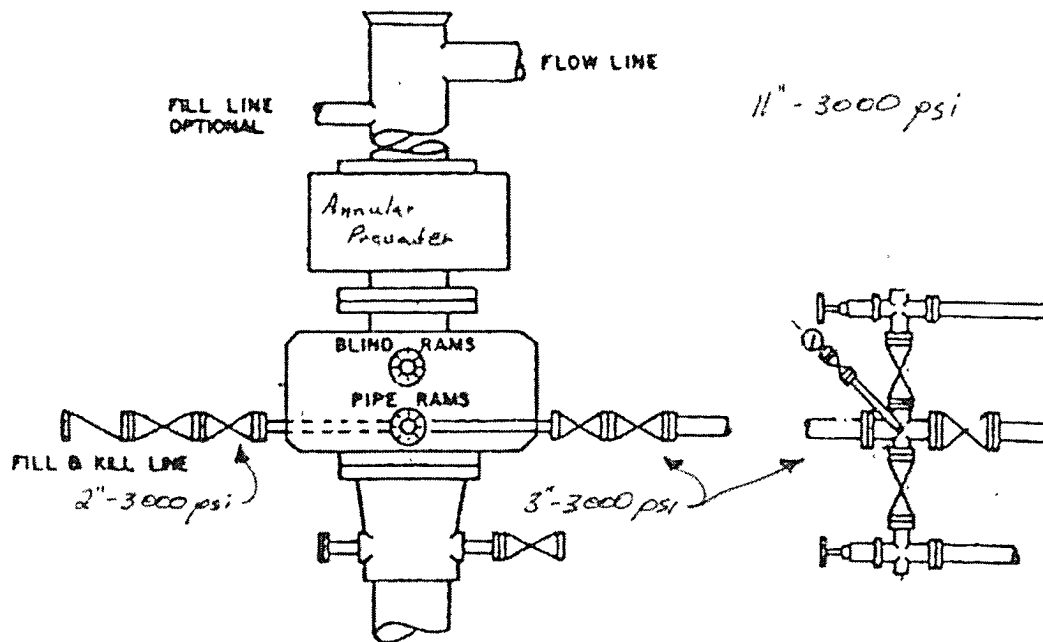
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, the proposed mud program will be modified to increase the mud weight.

10. H2S: None expected.

11. Anticipated starting date: August 1, 2008.

Anticipated completion of drilling operations: Approximately 10-14 days.

Targa Midstream Services, Limited Partnership  
Versado "AGI" Well No. 1  
2250' FSL & 1200' FWL Sec 27 T22S R37E  
Lea County, New Mexico



# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Targa Midstream Services, L.P.
LEASE NO.:	LC-058626A
WELL NAME & NO.:	Versado "AGI" # 1
SURFACE HOLE FOOTAGE:	2250' FSL & 1200' FWL
BOTTOM HOLE FOOTAGE:	Same
LOCATION:	Section 27, T. 22 S., R 37 E., NMPM
COUNTY:	Eddy County, New Mexico

## TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- 
- ☐ **General Provisions**
  - ☐ **Permit Expiration**
  - ☐ **Archaeology, Paleontology, and Historical Sites**
  - ☐ **Noxious Weeds**
  - ☐ **Special Requirements**

- ☒ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads

- ☐ **Road Section Diagram**

- ☒ **Drilling**

- ☐ **Production (Post Drilling)**

- Well Structures & Facilities
- Pipelines
- Electric Lines

- ☐ **Reserve Pit Closure/Interim Reclamation**

- ☐ **Final Abandonment/Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## **V. SPECIAL REQUIREMENT(S)**

**Mitigation Measures:** The mitigation measures include the Pecos District Conditions of Approval.

Versado "AGI" # 1: Closed Loop V- Door East

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

### **C. Closed Loop System**

Versado "AGI" # 1: Closed Loop V- Door East

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

## **F. ON LEASE ACCESS ROADS**

### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

### **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

---

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

### **Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

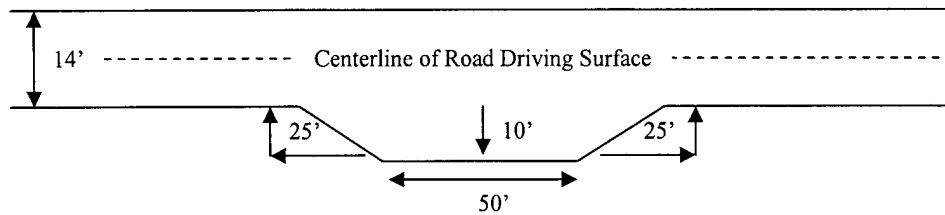
### **Ditching**

Ditching shall be required on both sides of the road.

### **Turnouts**

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

### Standard Turnout – Plan View

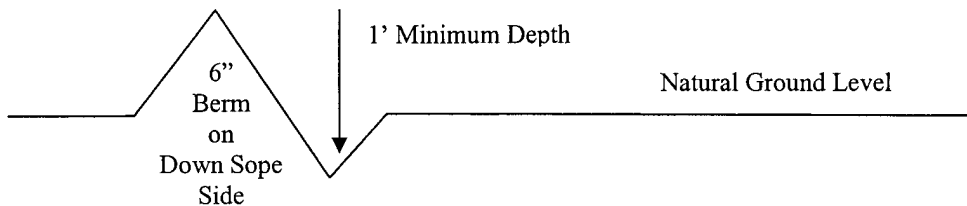


### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out sloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

### Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula For Spacing Interval Of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

### Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

**Fence Requirement**

Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

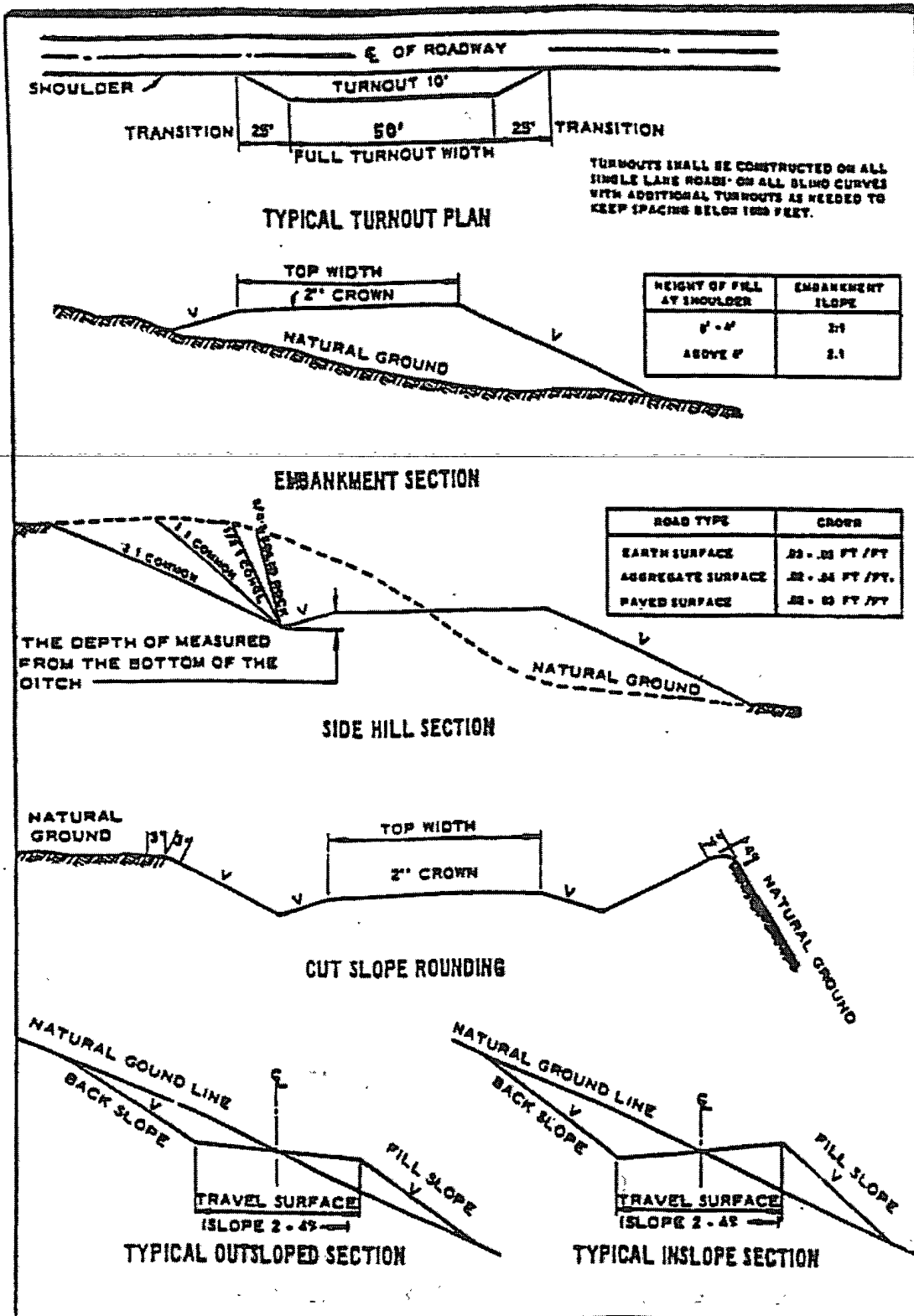
**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

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Figure 1 – Cross Sections and Plans For Typical Road Sections



## VII. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 393-3612

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

**Possible lost circulation in the Artesia Group.**

1. The 9-5/8 inch surface casing shall be set **at approximately 1150 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - c. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 7 inch production casing is:
  - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

**C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi. BOP/BOPE equipment to be tested to 3000 psi.**

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

#### **D. DRILL STEM TEST**

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If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

**WWI 090408**

## **VIII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Shale Green, Munsell Soil Color Chart Number 5Y 4/2.

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### **B. PIPELINES**

### **C. ELECTRIC LINES**

## **IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

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During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

### **B. RESERVE PIT CLOSURE**

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

## Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. ~~The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer.~~ Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sand love grass ( <i>Eragrostis trichodes</i> )	1.0
Plains bristlegrass ( <i>Setaria macrostachya</i> )	2.0

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

## **X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements.