

C-108

Tab

- A Wellbore schematic Monument AGI
- B AOR 2 mi., ½ mi., 1 mi.
- C C-108 Parts III through XIV
- D Legal Notice; Proof of Notification
- E List of Wells, 1 mi. AOR
- F Wellbore schematics, AOR wells
- G Pore Volume calculations
- H C-102 and area locator maps

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? Yes No
- II. OPERATOR: TARGA Resources LLC
ADDRESS: 8201 Smith Hwy 322 Monument, New Mexico 88265
CONTACT PARTY: Michael Pierce PHONE: 505 392 1915
505 948 0545
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Michael G. Pierce TITLE: Consultant
SIGNATURE: [Signature] DATE: 6-2-2003
E-MAIL ADDRESS: MPGeol@AOL.Com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

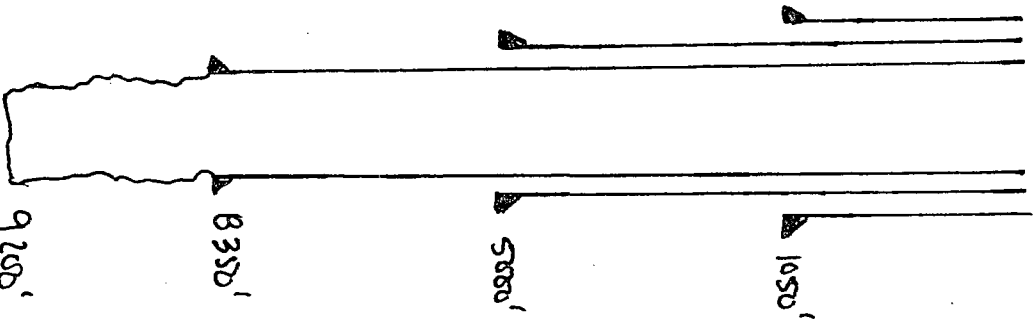
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: Thelga Resources LLCWELL NAME & NUMBER: M/Mount AGI No. 1WELL LOCATION: 662' ESC + 2513' FEL 0 36 195 36E

FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATA
Surface Casing

Hole Size: _____ Casing Size: 13 3/8"
 Cemented with: _____ SX. OR _____ ft³
 Top of Cement: Surface Method Determined: _____

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"
 Cemented with: _____ SX. OR _____ ft³
 Top of Cement: Surface Method Determined: _____

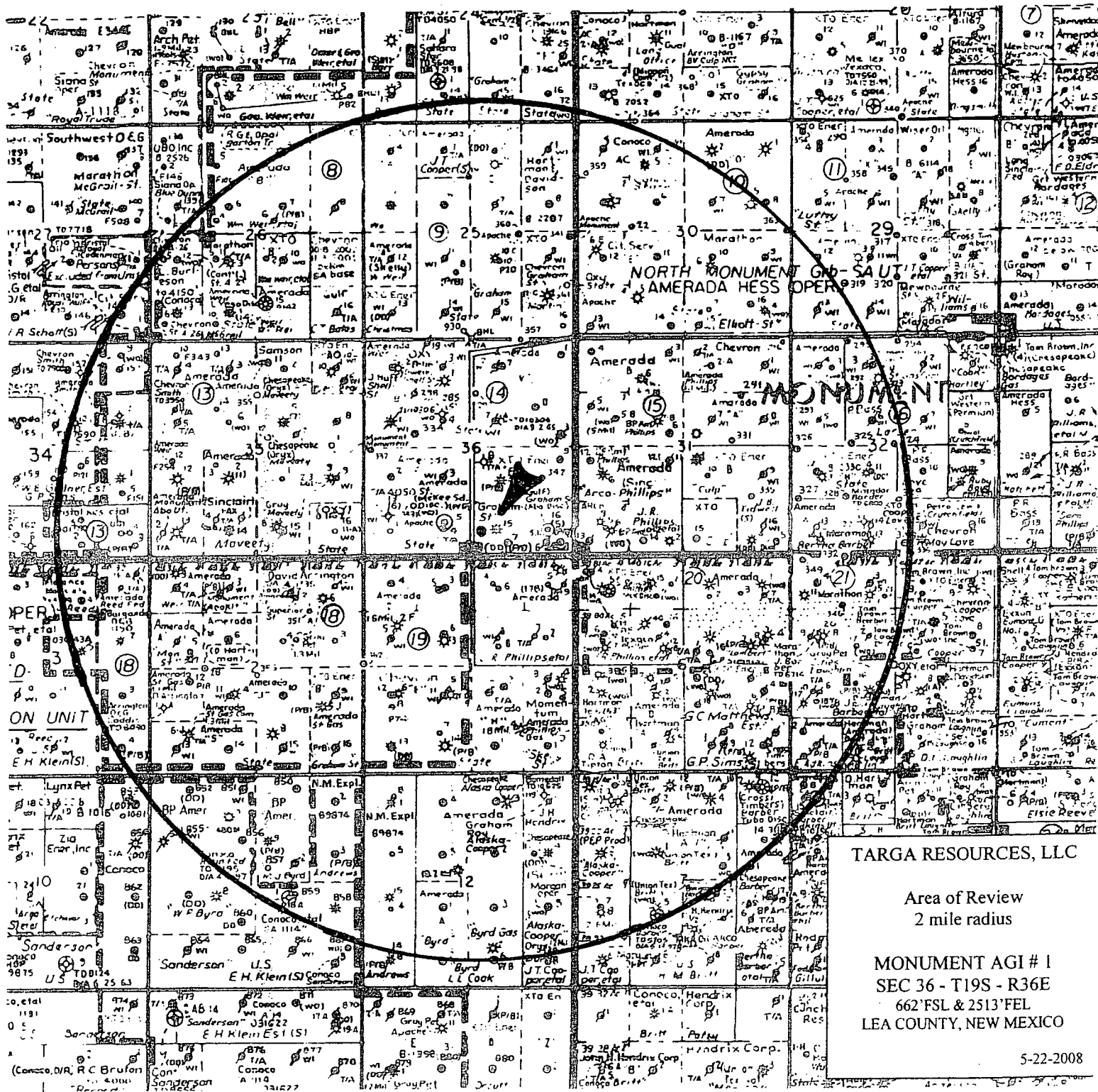
Production Casing

Hole Size: 8 7/8" Casing Size: 7"
 Cemented with: _____ SX. OR _____ ft³
 Top of Cement: Surface Method Determined: _____
 Total Depth: 8350'

Injection Interval

8350-9200 feet to OPEN-HOLE

(Perforated or Open Hole; indicate which)

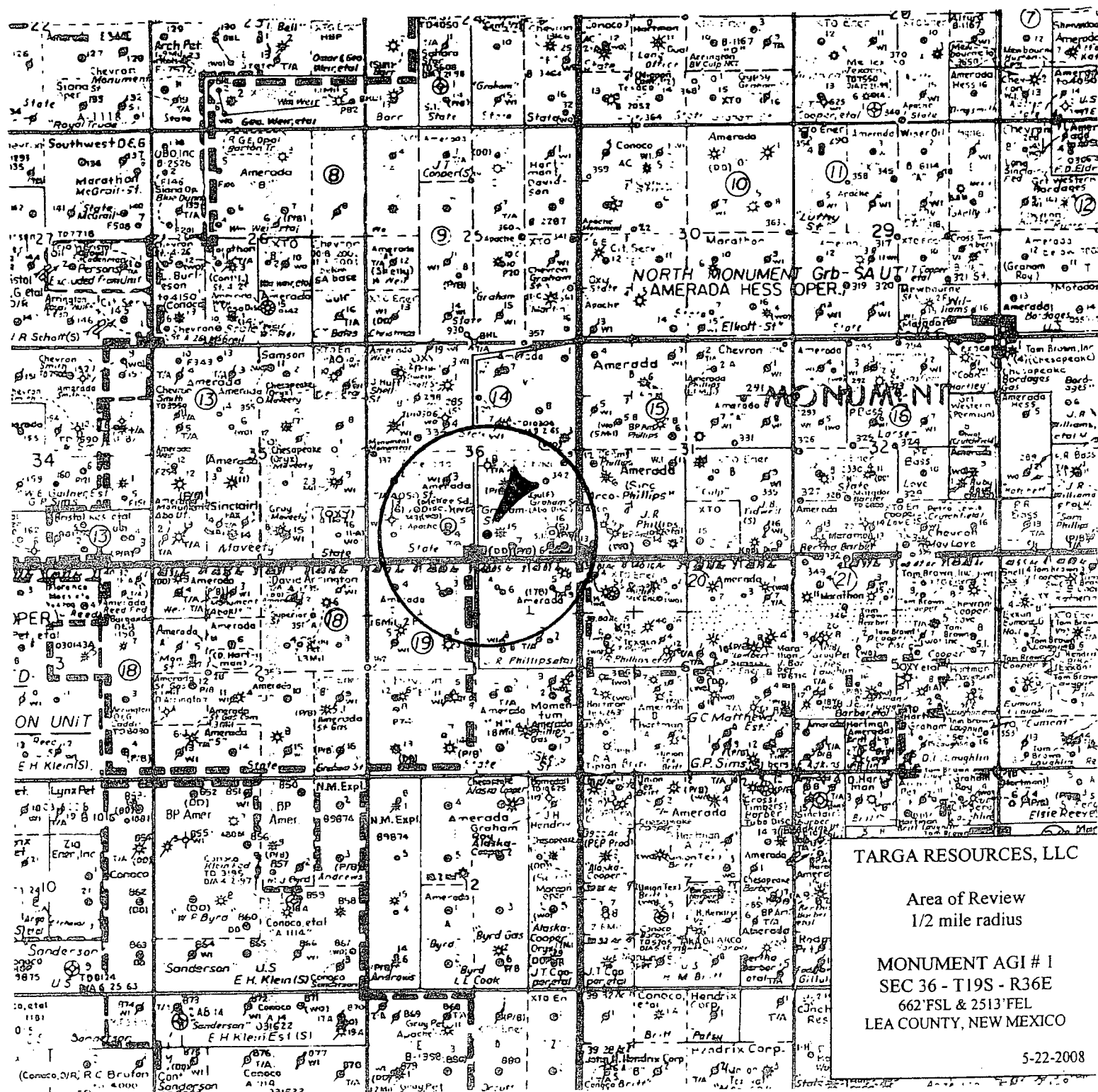


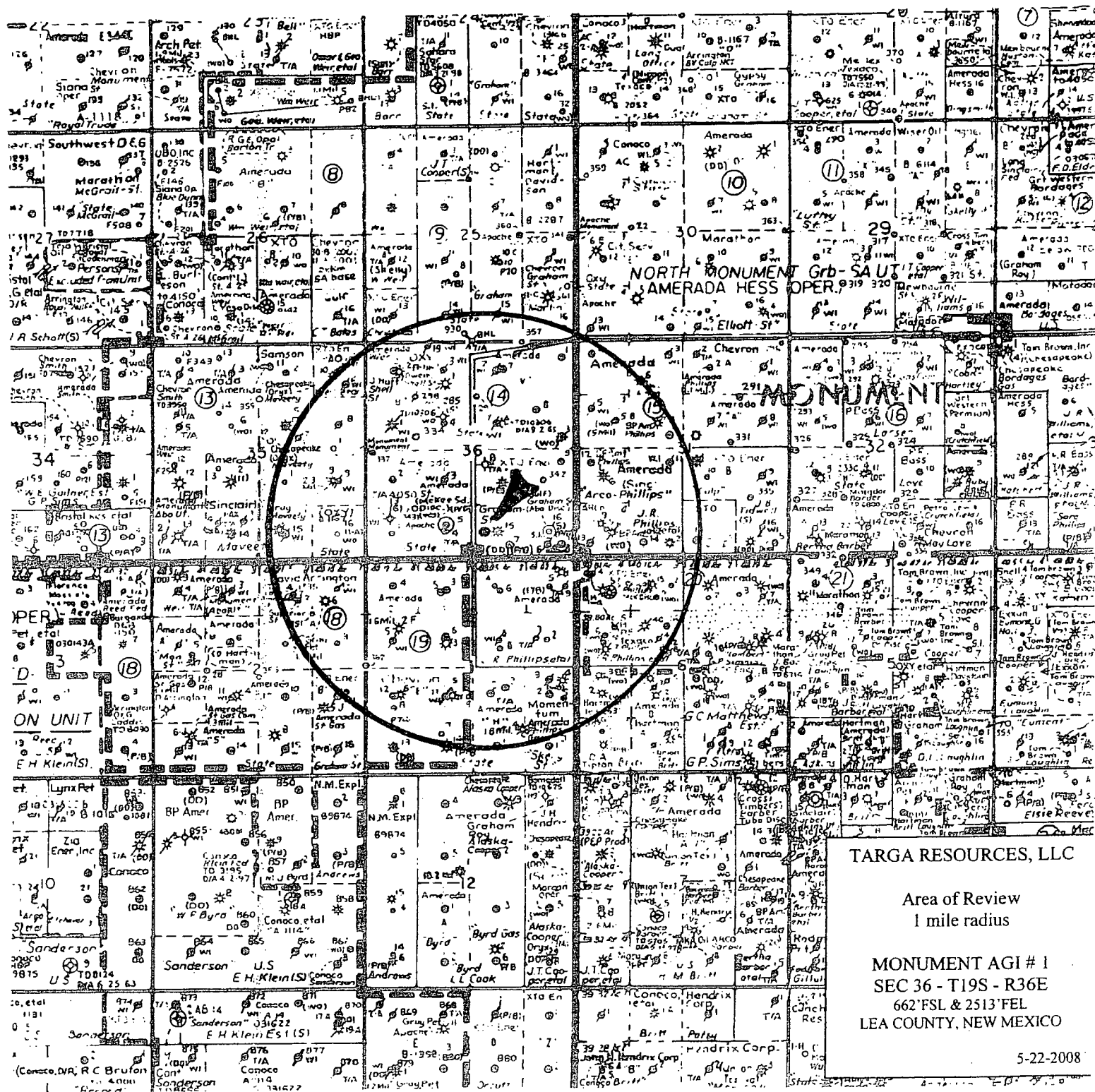
TARGA RESOURCES, LLC

Area of Review
2 mile radius

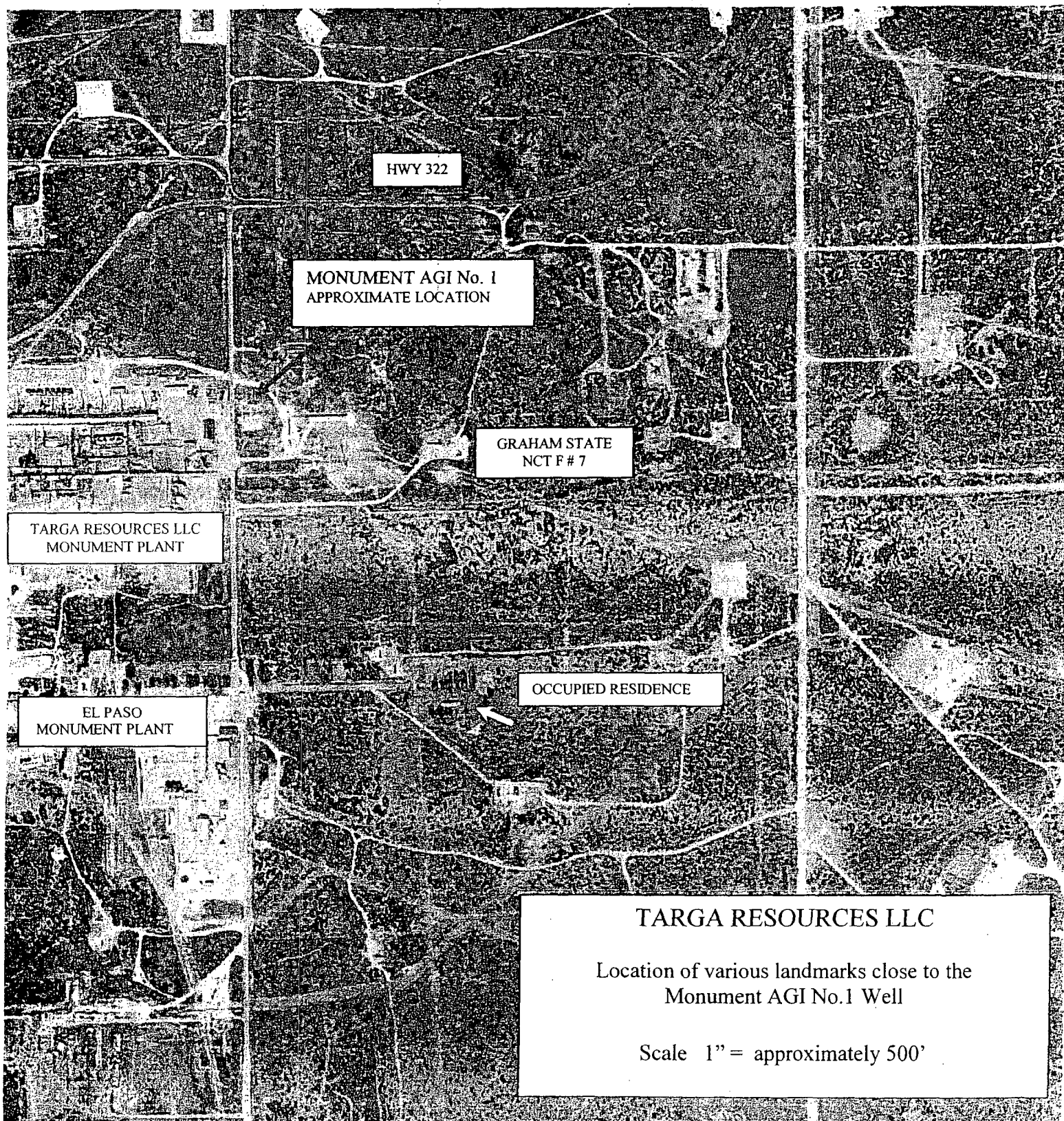
MONUMENT AGI # 1
SEC 36 - T19S - R36E
662' FSL & 2513' FEL
LEA COUNTY, NEW MEXICO

5-22-2008





5-22-2008



TARGA RESOURCES LLC

Location of various landmarks close to the
Monument AGI No.1 Well

Scale 1" = approximately 500'

Form C-108

PART III. WELL DATA

A.

1. Monument AGI No.1
662' FSL & 2513' FWL
Section 36 – T19S – R36E
Unit O
Lea County, New Mexico
2. See attached wellbore schematic
3. We propose to run approximately 8400' feet of 2 7/8" plastic coated tubing.
4. We will use an appropriate packer as a seal and will set it at approximately 50' above the open-hole interval. The casing annulus will be loaded with appropriate packer fluid.

PART III

B.

1. Targa Resources LLC proposes to drill the Monument AGI No.1 well at a non-standard location of 662'FSL & 2531'FEL in section 36 – T19S – R36E to a depth of approximately 9200'. The injection interval in the Monument AGI No.1 will be approximately 8350'-9200' in the Devonian and Fusselman formations to take advantage of the porosity development. The Devonian and Fusselman are not productive in the Area of Review.
2. The injection interval will be an open-hole completion at approximately 8350' – 9200'.
3. This well will be drilled by Targa Resources LLC, as an acid gas injection well.
4. There will be no perforations in this well.

5. There is production in the AOR from both above and below the injection interval;

Eumont Yates-SR Queen at approximately 2700-3500'

Eunice Monument Grayburg San Andres at approximately 3500-3900'

Monument Paddock at approximately 5100'

Monument Blinebry at approximately 5600'

Monument Tubb at approximately 6700'

Monument Abo at approximately 7100'

Monument McKee – Ellenburger at approximately 9500'

PART VII.

1. The proposed average daily injection rate will be 3500 bbl/day +2.66 mmscfd, and the maximum rate will be 5000 bbls + 3.38 mmscfd.
2. The system will be closed.
3. The anticipated injection pressure is 0 PSI. The maximum injection pressure will not exceed the limits set forth by the NMOCD.
4. The source of the water will be from TARGA RESOURCES LLC Monument Gas Plant, located just west of the Monument AGI No.1 well.

The analysis for the gas is as follows;

Design basis:

For minimum volume

Low Case

Acid Gas:

H₂S, mol % 21.27

CO₂, mol % 68.54

Volume, mmscfd 2.66

For maximum volume

High Case

Acid Gas:

H₂S, mol % 28.14

CO₂, mol % 61.82

Volume, mmscfd 3.38

Sp.gravity = approx 1.4.

5. The Devonian/Fusselman formations are not productive within one mile of the Monument AGI No.1 well location.

PART VIII

The injection interval is Siluro-Devonian aged Devonian/Fusselman formations. It is primarily composed of porous Dolomite, Limestone, and minor chert. The Devonian/Fusselman is approximately 850' thick at the proposed location.

The top of the Devonian is at approximately 8350', with the base of the Fusselman at about 9200'.

The entire area is overlain by Quaternary alluvium. This alluvium is the major source of fresh water in the immediate area, at a depth of approximately 20 to 50' from surface. The Ogallala is not present at this location.

There are no known sources of drinking water below the injection interval.

PART IX

The injection interval will be treated with acid if necessary.

PART X

The well will be logged with standard open-hole logs, including GR - Neutron, Density with caliper, and resistivity.

PART XI

Analyses for fresh water wells in the area were previously submitted for the Graham State NCT-F No. 7 well, located 330'FSL & 1650'FEL section 36 - T19S - R36E, unit O, Lea County New Mexico. This well is currently an active SWD well operated by Targa Resources, LLC for its' Monument gas plant. This well was permitted in June 1994, OCD permit SWD-561. The proposed Monument AGI No.1 and the Graham State NCT- # 7 well are both located in unit O, section 36 - T19S - R36E.

PART XII

We have examined all available geologic and engineering data, and find no evidence of open faults or any other hydrologic connection between the proposed disposal zone and any underground sources of drinking water.

PART XIV

Targa Resources LLC is the surface owner of the land where the Monument AGI No.1 well will be drilled. Please see attached C-102. There is one residence within the one mile radius of review. It is located approximately 1100 feet southeast of the Monument AGI No.1 location (see Landmark map).

LIST OF OFFSET OPERATORS WITHIN ½ MILE RADIUS

Apache Corporation	6120 S Yale Ave Suite 1500 Tulsa, OK 74136-4224
XTO Energy	200 N Loraine Ste 800 Midland, Texas 79701
Chevron USA Inc.	15 Smith Road Midland, Texas 79705

PART XIV cont.

LIST OF OFFSET OPERATORS WITHIN A ONE MILE RADIUS
THAT PENTRATE THE INJECTION INTERVAL.

Apache Corporation	6120 S Yale Ave Suite 1500 Tulsa, OK 74136-4224
Chevron USA Inc	15 Smith Road Midland, Texas 79705

Copy of newspaper advertisement.

LEGAL NOTICE

TARGA RESOURCES LLC, whose address is 8201 South Hwy 322 Monument, New Mexico 88265, proposes to drill a new well the purpose of disposing produced water and acid gas from its' gas plant operations in Monument, New Mexico. The well is the Monument AGI No.1 located 662'FSL & 2513'FEL, Section 36 – T19S – R36E, unit O, Lea County New Mexico. The injection interval will be in the Devonian/Fusselman formations at a depth of approximately 8350'-9200'. The average daily injection will be 3500 bbls/day, with a maximum rate at 5000 bbls/day, with 0 pressure.

Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Inquires regarding this application should be directed to Mr. Michael Pierce, PO Box 16555, Albuquerque New Mexico 87191-6555, (575) 392-1915 or (505) 948-0545.

PROOF OF NOTIFICATION

7007 2560 0003 0324 5439

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only, No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

MIDLAND TX 79701

Postage	\$ 1.68	0111
Certified Fee	\$2.70	12
Return Receipt Fee (Endorsement Required)	\$0.00	Postmark Here
Restricted Delivery Fee (Endorsement Required)	\$0.00	JUN 03 2008
Total Postage & Fees	\$ 4.38	06/03/2008

Sent To **XTO Energy**
Street, Apt. No.,
or PO Box No. **200 N LORRAINE Ste 800**
City, State, ZIP+4 **Midland, TX 79701**

PS Form 3800, August 2006 See Reverse for Instructions

9455 4220 E000 0952 2007

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only, No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

TULSA OK 74136

Postage	\$ 1.68	0111
Certified Fee	\$2.70	12
Return Receipt Fee (Endorsement Required)	\$0.00	Postmark Here
Restricted Delivery Fee (Endorsement Required)	\$0.00	JUN 03 2008
Total Postage & Fees	\$ 4.38	06/03/2008

Sent To **Apache Corporation**
Street, Apt. No.,
or PO Box No. **6120 S Yale Ave Suite 1500**
City, State, ZIP+4 **Tulsa OK 74136-4224**

PS Form 3800, August 2006 See Reverse for Instructions

7007 2560 0003 0324 5422

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only, No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

MIDLAND TX 79705

Postage	\$ 1.68	0111
Certified Fee	\$2.70	12
Return Receipt Fee (Endorsement Required)	\$0.00	Postmark Here
Restricted Delivery Fee (Endorsement Required)	\$0.00	JUN 03 2008
Total Postage & Fees	\$ 4.38	06/03/2008

Sent To **Chevron USA Inc**
Street, Apt. No.,
or PO Box No. **15 Smith Road**
City, State, ZIP+4 **Midland TX 79705**

PS Form 3800, August 2006 See Reverse for Instructions

TARGA RESOURCES LLC

LIST OF WELLS IN AREA OF REVIEW

1 MILE AREA OF REVIEW

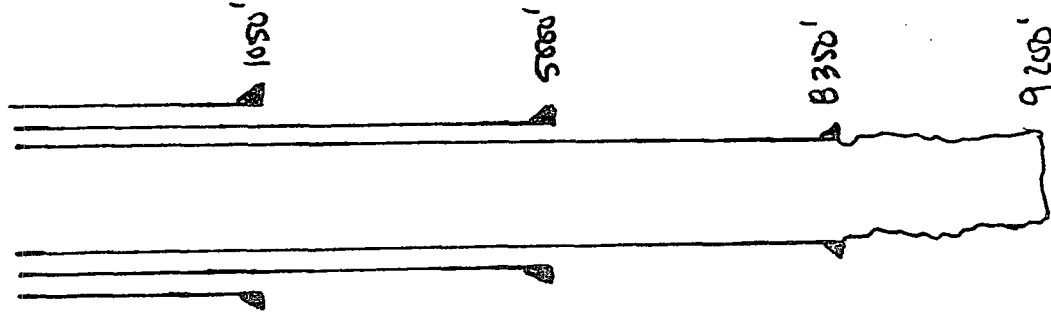
WELLS THAT PENETRATE THE INJECTION INTERVAL

API NUMBER	WELL NAME	OPERATOR	SEC - T - RANGE	UNIT	FOOTAGE	TD	PERFORATIONS	POOL NAME
30-025-12481	NMGSAU # 285	Apache Corp	36-19-36	F	1830FNL & 1980FWL	10305	3736-3930	Eunice Monument GB/SA
30-025-20517	NMGSAU # 286	Apache Corp	36-19-36	G	1980FNL & 1830FEL	10306	NO PERFS	Eunice Monument GB/SA
30-025-12473	St. F Gas Com # 5	Apache Corp	36-19-36	N	785FSL & 1980FWL	10225	3146-3330	Eumont-Yates SR-Queen
30-025-12478	NMGSAU # 32	Apache Corp	36-19-36	P	660FSL & 660FEL	9822	3721-3885	TA'D Eun-Mon GB/SA
30-025-05780	JR Phillips A # 8	Hess	31-19-37	M	660FSL & 942FWL	9899		P&A 4-1998
30-025-23632	JR Phillips # 9	Arco Permian	31-19-37	M	800FSL & 660FWL	9650		P&A 1-2000
30-025-04134	JR Phillips # 5	Apache Corp	1-20-36	A	660FNL & 660FEL	9841	6868-7685	Monument Abo
30-025-04136	JR Phillips # 7	Apache Corp	1-20-36	H	1980FNL & 760FEL	10214	5606-5760	TA'D Monument Blinbry
30-025-05964	JR Phillips # 11	Chevron USA	6-20-37	D	736FNL & 738FWL	9814	9490-9800	McKee-Ellenberger
30-025-05926	L M Lambert # 2	Apache Corp	6-20-37	G	1980FNL & 1980FEL	9870	9832-9850	McKee-Ellenberger
30-025-05936	Britt A # 7	Union Texas	6-20-37	K	2310FSL & 1860FWL	10095		P&A 8-1978

INJECTION WELL DATA SHEET

OPERATOR: TALGA Resources LLCWELL NAME & NUMBER: Monument AGI No. 1WELL LOCATION: 662' FSL & 2513' FGL

FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
		36	19S	36E

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ Casing Size: 13 3/8"

Cemented with: _____ sx. or _____ ft³

Top of Cement: Surface Method Determined: _____

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented with: _____ sx. or _____ ft³

Top of Cement: Surface Method Determined: _____

Production Casing

Hole Size: 8 7/8 Casing Size: 7"

Cemented with: _____ sx. or _____ ft³

Top of Cement: Surface Method Determined: _____

Total Depth: 8350'Injection Interval
8350 - 9200 feet to OPEN-HOLE

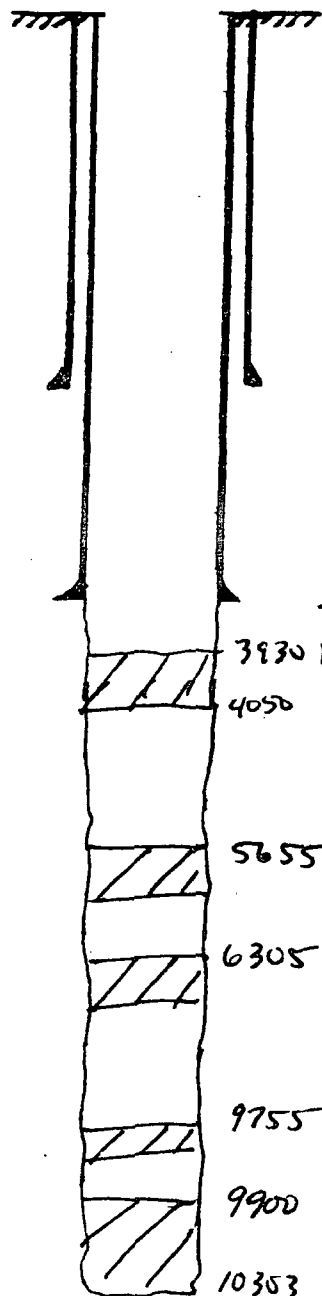
(Perforated or Open Hole; indicate which)

30-025-12481

OPERATOR	Apache Corp		DATE	3-2-2008
LEASE	NM6SAU	WELL NO.	285	LOCATION F 1830N + 1980W

Section 36-19-36
Lea Co New Mexico

Eunice Monument 6B/SA



13 $\frac{3}{8}$ " casing set at 1121' with 1125 sx of _____ ce
Hole size _____" Circ

perf 3736 - 3749
OH 3749 - 3930

9 $\frac{5}{8}$ " casing set at 3749' with 600 sx of _____ cement
3930 Hole size 12 $\frac{1}{4}$ " TOC @ 2580 w/ 50% efficiency

Drill wt to 3930 PBTD

175 sx plug @ 3700 - 4050

20 sx plug @ 5655 - 5700

20 sx plug @ 6305 - 6350

20 sx plug @ 9755 - 9800

180 sx plug @ 9900 - 10303

Total Depth 10305' Hole size _____"

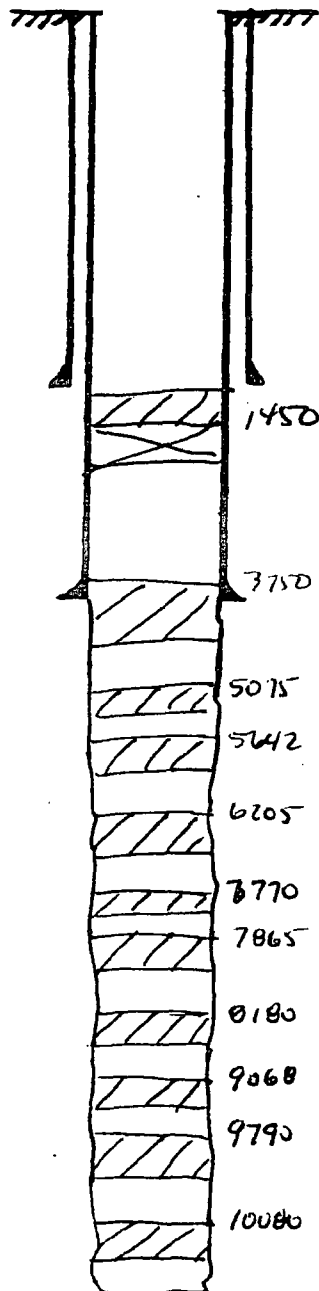
PBTD 3930'

30-025-20517

OPERATOR <u>Apache Corp</u>	DATE <u>3-1-2008</u>	
LEASE <u>NM6SAU</u>	WELL No. <u>286</u>	LOCATION <u>1980N + 1830E</u>

Sect 36-19-36
Lea County New Mexico

TA'D NM6SAU well
NO perforations



10 3/4" casing set at 1096' with 1050' sx of _____ ce

Cmt Ret @ 1450' + 4 SX cmt
perf 1510' pump 400 SXs Circ to Surface

7 5/8" casing set at 3750' with 600' sx of _____ ceme

Hole size _____ " TOC By Am Log @ 1750'

35 SX plug @	3750 - 3840
25 SX plug @	5075 - 5105
25 " " "	5642 - 5752
25 " " "	6205 - 6315
25 " " "	6770 - 6880
25 " " "	7865 - 7975
25 " " "	8180 - 8290
25 " " "	9068 - 9170
25 " " "	9790 - 9900
25 " " "	10080 - 10190

Total Depth 10306' Hole size _____ "

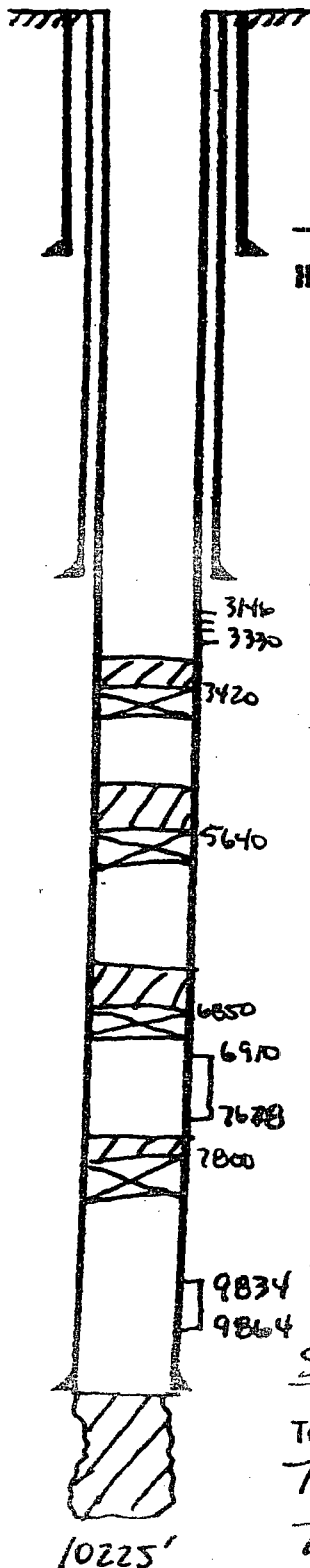
PBTD 1450'

30-025-12473

OPERATOR APACHE CORPORATION	DATE 2-14-2008	
LEASE State F Gas Com	WELL No. S	LOCATION Unit N 785 FSL + 1980 FWL

Sec 36-7195-R36E
Lea County NM

Active Gumm + Yates - SR - Queen



13^{3/8}" casing set at 187' with 200 sx of _____ cement
Hole size 17^{1/2}" Circulated

Perf 3146 - 3330

CIBP @ 3420 + 25 SX cmt PBTD 3400'

8^{5/8}" casing set at 2400' with 1300 sx of _____ cement

Hole size 11" TOC by TS @ 1226'

Perf 3579 - 3756 SQZ w/ 100 SX

SQZ CSL LATE @ 4447 - 4478 w/ 100 SX

CIBP @ 5640 + 25 SX cmt

Perf 5691 - 5711 SQZ w/ 125 SX

Perf 5620 - 5712 SQZ w/ 150 SX

CIBP @ 6850 + 25 SX cmt

Perf 6910 - 7201, 7562 - 7678

CIBP @ 7800' + 15X cmt

Perf 9834 - 9864

Perf 9834 - 9920 SQZ w/ 100 SX

5^{1/2}" casing set at 9918' with 800 sx of _____ cement

Total Depth 10225' Hole size 7^{3/4}" TOC by
TS @ 4480. Perf 4460 SQZ w/ 700 SX
TOC by TS 2544'

PBTD 3400'

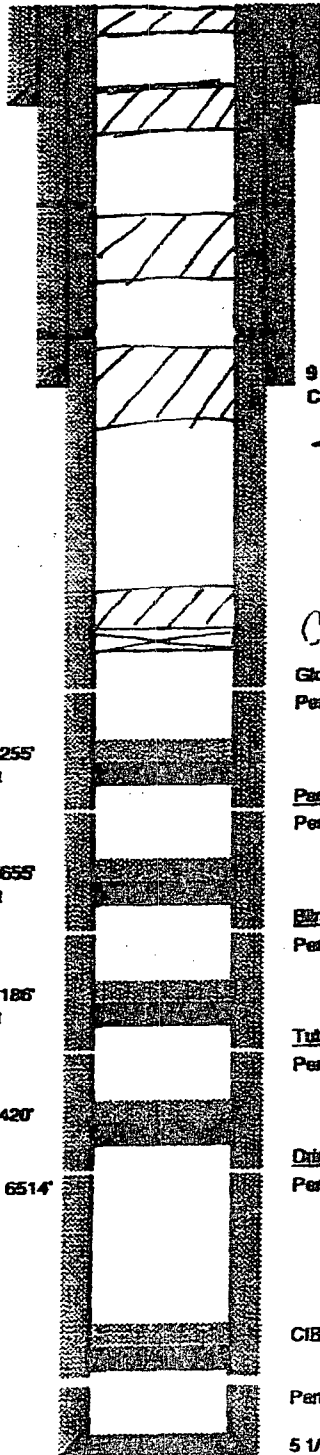
30-025-23632

OPERATOR ANCO PERMIAN	DATE 1-1999
LEASE JR Phillips A	WELL No. 9
LOCATION MT+M 800 FSL + 660 FWL	

Sec 31-T19S-R37E

Lea Co NM

PJA 1-2000



13 3/8", 48", H-40, ST&C @ 560'
Cmt w/ 550 sz. Circ cmt

Peris @ 2418'-2437' Sqd w/ 115 sz

Perf 5 1/2" @ 2710' & cmt
to surface w/ 600 sz cmt

Peris @ 2948'-3445' Sqd w/ 322 sz

9 5/8", 32.3/36", H-40/J-55 @ 3645'
Cmt w/ 1500 sz. Circ cmt

Spot 25 SX 3645-3545

Spot 15 SXS @ SURFACE

Spot 25 SXS 610-510

Spot 25 SXS 1125-1025

CIBP @ 5069 + 25 SX cmt

Glorieta

Peris 5105'-5123' & 5135'-5138' 22 shots

Pardlock

Peris 5238'-5283' 17 shots

Blinberry

Peris 5685'-5884' 40 shots

Tubb

Peris 6202'-6291' 23 shots

Dinkard

Peris 6426'-6569' 41 shots

CIBP @ 5255'
w/ 35' cmt

CIBP @ 5655'
w/ 35' cmt

CIBP @ 6186'
w/ 35' cmt

CIBP @ 6420'
w/ 35' cmt

DV tool @ 6514'

CIBP @ 9435' w/ 35' cmt on top

Peris 9442'-9603'

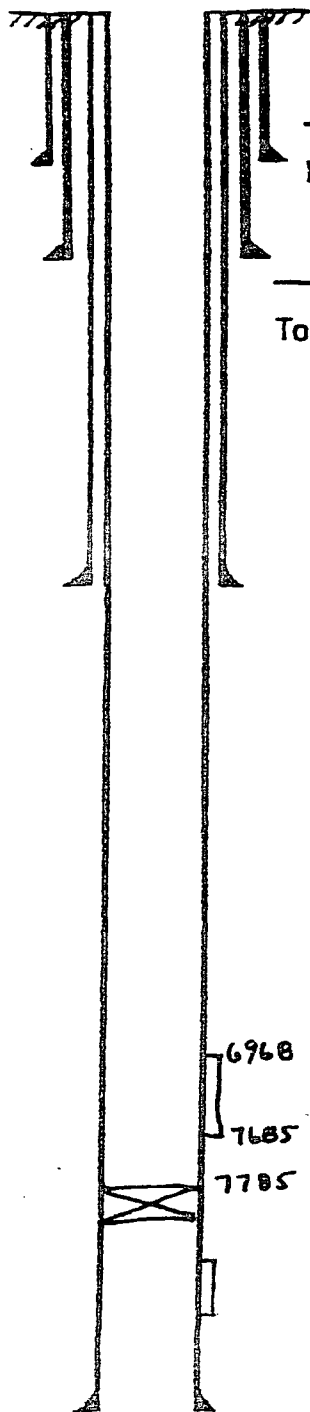
5 1/2", 15.5/17", J-55/A-80, LT&C @ 9,650'
Cmt w/ 1440 sz to 2720'

30-025-04134

OPERATOR APACHE CORPORATION	DATE 2-14-2008
LEASE J. R. Phillips	WELL No. 5
LOCATION Unit A 660' FNL ± 660' FEL	

SEC 1-T20S-R36E
LEA CO NM

Active Monument ABO



16 " casing set at 169 ' with 300 sx of _____ ceme

Hole size 24 " Circulated

11 3/4 " casing set at 2419 ' with 20SD sx of _____ ceme

Total Depth 2419 ' Hole size 15 " Circulated

Sqz CSG Lnk @ 5159-5191 w/ 100 SX 7/98

8 5/8 " casing set at 5121 ' with 12SD sx of _____ ceme

Hole size 10 5/8 " TOC by TS @ 2048'

perf	5180-5200	}	Sqz w/ 150 SX
perf	5215-5218		
perf	5595-5600	}	Sqz w/ 50 SX
perf	5600-5610		
perf	5215-5220		Sqz w/ 50 SX
perf	5660-5715		Sqz w/ 75 SX
perf	7070-7110		Sqz w/ 98 SX
perf	7110-7164	}	Sqz w/ 125 SX
perf	7190-7230		
perf	7645-7665	}	Sqz w/ 135 SX
perf	7665-7690		
perf	6968-7685		

CIBP @ 7785

perf 9610-9870

5 1/2 " casing set at 9941 ' with 1500 sx of _____ ceme

Total Depth 9941 ' Hole size 7 3/4 " TOC by Calc

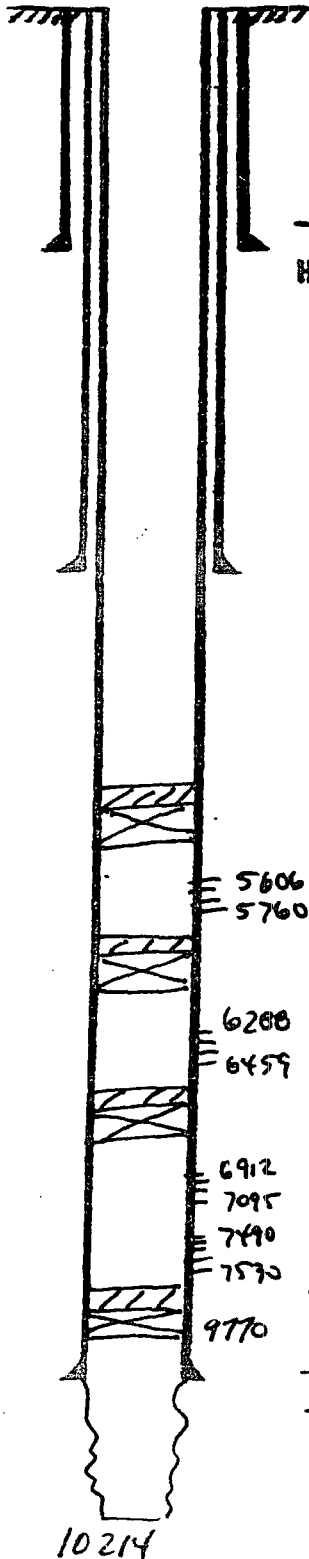
@ 4313 w/ 50% Effici

PBTD 7785

30-025-04136

OPERATOR Apache Corporation	DATE 3-8-2008	
LEASE JR Phillips	WELL NO. 7	LOCATION with 1980N + 760E

Section 1-20-36
 Lea Co New Mexico
 TMD Monument bluekey
 5-2107



13 3/8 casing set at 997 with 750 sx of _____ ce
 Hole size _____ Circ

CSG back @ 5147-5266 sqz w/ 50 SXs

8 5/8 casing set at 5234 with 1500 sx of _____ ce
 Hole size 11 TOC By TS @ 1940'

ref 5130-5143 sqz w/ 100 SX

ref 5165-5210 sqz w/ 50 SX

ref 5160-5240 sqz w/ 50 SX

CIBP @ 5590 + 25XS cmt

ref 5600-5760

CIBP @ 6275 + 25X cmt

ref 6288-6459

CIBP @ 6700 + 25X cmt

ref 6912-7095

ref 7490-7530

CIBP @ 9770 + 25XS cmt

5 1/2 casing set at 10004 with 1200 sx of _____

Total Depth 10214 Hole size 7 3/4

TOC @ 5502 w/ 50% efficiency

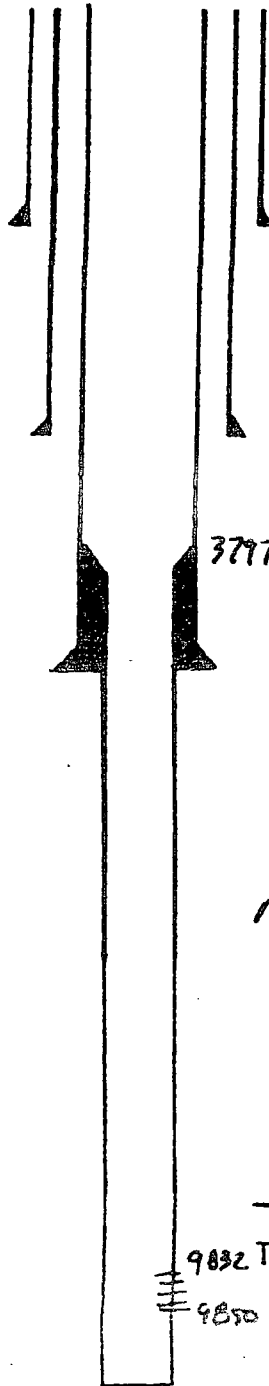
PBTD 5590

30-025-05926

OPERATOR	Apache Corp		DATE	3-1-2008
LEASE	CM Lambert	WELL No.	2	LOCATION Unit 6 1980N + 1980E

Section 6-20-37
Lea Co New Mexico

Active Monument McKee Ellenberger



12 1/2" casing set at 202' with 145 sx of _____ cement
Hole size _____" Circ.

8 5/8" casing set at 2402' with 750 sx of _____ cement
Hole size 10 3/4" TOC @ 50% - 490'

3797 TOL
6 5/8" casing set at 3016' with 125 sx of _____ cement
Hole size 7 7/8" TOC @ 50% - 3045'

perf 3703 - 3713 Grayburg SQZ perf 11-1980
150 SX

re perf 9832 - 9850

perf 9568 - 9786 SQZ w/ 150 SX 11-1980

CIP @ 9812 DO 11-1980

perf 9832 - 9850

4 1/2" Liner casing set at 9861 - 3797 sx of 330 cement

9832 Total Depth 9870' Hole size _____"
TOC by TS @ 5150' SQZ TOL
w/ 350 SXS

9870

30-025-05936

OPERATOR	UNION TEXAS		DATE	3-7-2008
LEASE	Britt A	WELL No.	7	LOCATION E 23N5 + 1000 W

Section 6-20-37
Lea Co New Mexico

P+A 8-1978

10 SKS @ 0-100'

25 SKS @ 1100-850'

13 7/8" casing set at 997' with 800 SK of _____ CEI

1140 Hole size _____" Circ

1750 25 SK plug @ 2000-1750
25 SK plug @ 4750-4500

2000 SQZ 4870-4900 w/ 10 SK

4300 surf 4900 SQZ w/ 1020 SK to surface
4750 5 1/2 - 9 5/8 annulus

5109 9 5/8" casing set at 5266' with 2550 SK of _____ CEI

Hole size 12 1/2" TOC @ 782 w/ 50% efficiency

Cmt Act @ 5109 + 50' on top of Act

surf 5167-5244 SQZ w/ 50 SK

35 SK plug @ 6591 Tag @ 6287

50 SK plug 6340-6640 Tag @ 6591

CSG lost 6030-60 SQZ w/ 100 SK

CSG lost @ 8176 SQZ w/ 100 SK

ABTO 9650

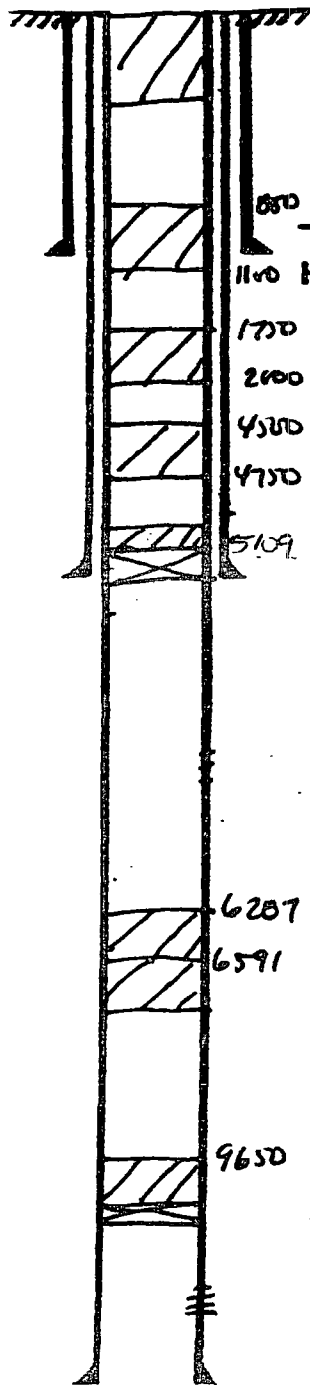
Spot 100' plug on Model D Probe @ 9750

surf 9793-9826

5 1/2" casing set at 10091' with 625 SK of _____ CI

Total Depth 10095' Hole size 7 7/8"

TOC @ 7891 w/ 50% efficiency

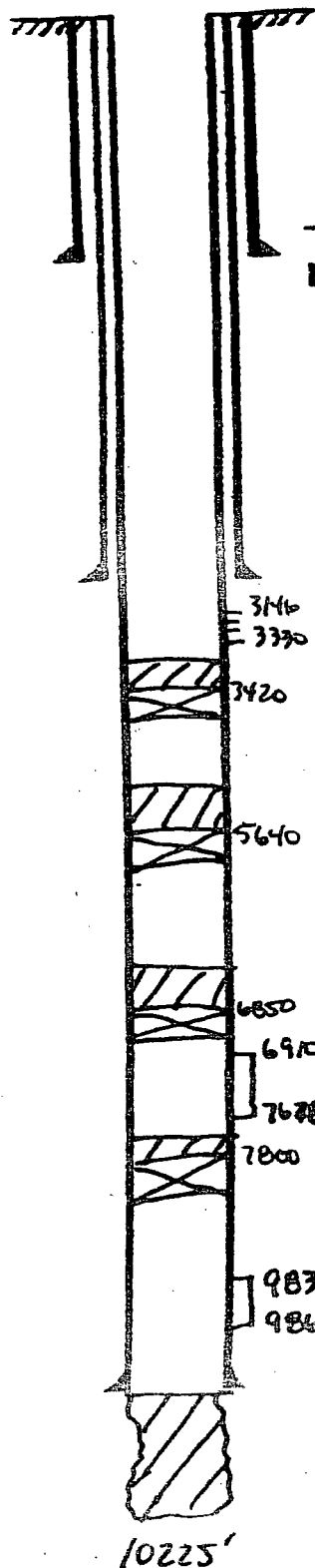


30-025-12473

OPERATOR	APACHE CORPORATION		DATE	2-14-2008
LEASE	State F Gas Com	WELL No.	S	LOCATION Unit N 785 FSL + 1980 FWL

Sec 36-7195-R36E
Lea County NM

Active Eumant-Yatos-SR-Queen



$13\frac{3}{8}$ " casing set at 187' with 200 sx of _____ cement
Hole size $17\frac{1}{2}$ " Circulated

Perf 3146-3330

CIBP @ 3420 + 25 SX cmt PBTD 3400'

$8\frac{5}{8}$ " casing set at 2400' with 1300 sx of _____ cement

Hole size 11" TOC by TS @ 1226'

Perf 3579-3756 SQZ w/ 100 SX

SQZ CSL LEAK @ 4447-4478 w/ 100 SX

CIBP @ 5640 + 25 SX cmt

Perf 5691-5711 SQZ w/ 125 SX

Perf 5620-5712 SQZ w/ 150 SX

CIBP @ 6850 + 25 SX cmt

Perf 6910-7201, 7562-7678

CIBP @ 7800' + 1 SX cmt

Perf 9834-9864

Perf 9834-9920 SQZ w/ 100 SX

$5\frac{1}{2}$ " casing set at 9978' with 800 sx of _____ cement

Total Depth 10225' Hole size $7\frac{3}{4}$ " TOC by

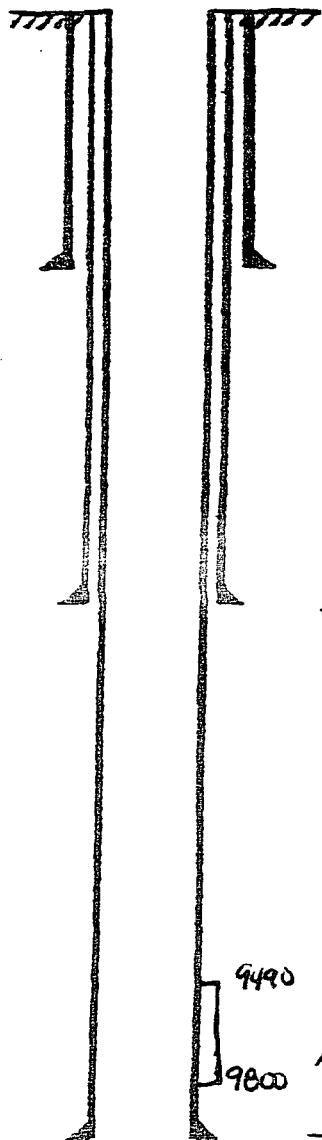
TS @ 4480. Perf 4460 SQZ w/ 700 SX

TOC by TS 2544'

PBTD 3400'

30-025-05964

OPERATOR	Chevron USA Inc		DATE	2-14-2008
LEASE	J.R. Phillips	WELL No.	11	LOCATION
Sec 6-T205-N37E		Unit A 736' FNL + 739' FW		
Lea CO NM		Active Monument McKee Elkburg.		



13 3/8" casing set at 1050' with 1000 sx of _____
 Total Depth 1050' Hole size 17 1/2" Circulated

9 5/8" casing set at 5064' with 4000 sx of _____
 Hole size 12 1/4" DV @ 3640' 1st stage w/ 5000 sx
 2nd stage w/ 3500 sx
 amt Circulated

9490 perf 9490 - 9800
 9800 perf 9532 - 9738

5 1/2" casing set at 9814' with 1400 sx of _____
 Total Depth 9814' Hole size 7 7/8" DV @ 7440

1st stage 750 sx circ
 2nd stage 650 sx TOC
 TS @ 4590

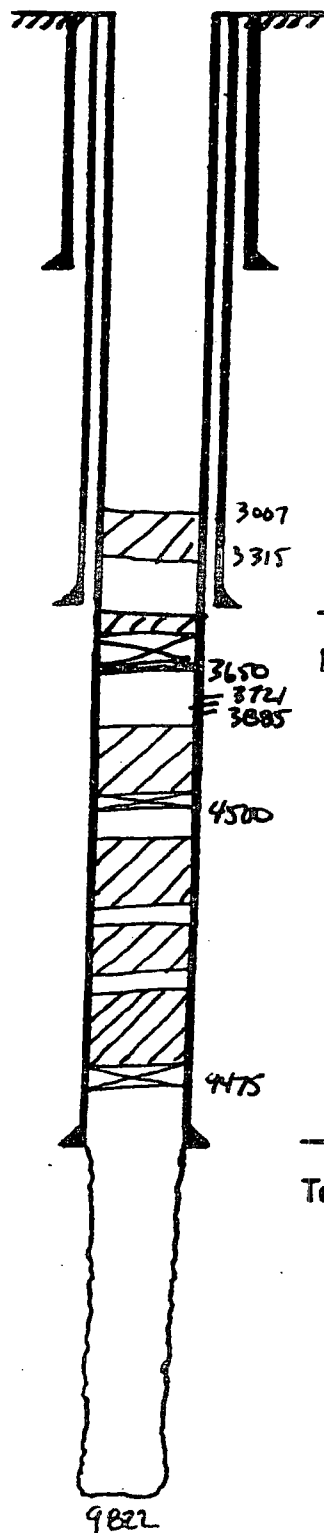
30-025-12478

OPERATOR APACHE Corporation		DATE 2-14-2008	
LEASE NM GSA U BIK 14	WELL No. 32	LOCATION UNIT A 660' FSL + 660' FE	

Sec 36 - T19S - R36E

TA'D well 4-2001
Monument 6B/SA

Spot 50 SX 3315 - 3007



13³/₈" casing set at 302' with 300 sx of _____

Total Depth 302 ' Hole size 17¹/₂" Circulated
4-2001 set CIBP @ 3650' + 14' cmt 502 CSG
Leak @ 3488 - 3519 w/ 50 SX

Perfs 3721 - 3885

CIBP @ 4500' + 35 SX cmt.

9⁵/₈" casing set at 2787' with 1300 sx of _____ c

Hole size 12¹/₄" TOC by TS @ 1205'

perf 7" @ 4574 w/ 4 SHOTS, cmt w/
365 SXS. TOC by TS @ 2980'

perf 5710 - 5745 Sg20 w/ 50 SX

perf 7160 - 7277 Sg20 w/ 100 SX

perf 7590 - 7670 Sg20 w/ 2 SX

CSG Leak @ 6308 - 6868 Sg20 w/ 186 SX

100' plug @ 6801 - 6901

100' plug @ 5065 - 5165

7" casing set at 9785' with 500 sx of _____ c

Total Depth 9822 ' Hole size 8⁵/₈" TOC by TS
4630'

CIBP @ 9475 + 35 SX cmt.

perf 9501 - 31

perf 9752 - 54

OH 9785 - 9822'

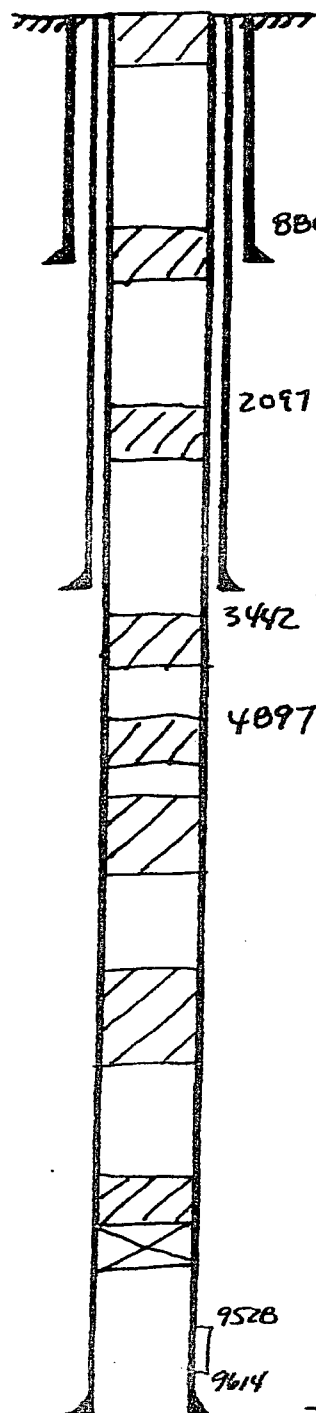
PBT'D 3007

30-025-05780

OPERATOR	Hess (Arco)	DATE	2-14-2008
LEASE	J. L. Phillips	WELL NO.	8
		LOCATION	Unit #1 660' FSL + 942' FSL

Sec 31-T19S-R37E
LA CO NM

ATA 4-98



Spot 10 SK @ 81'-0

880 13⁷/₈ set @ 981' w/ 900 SK
17¹/₂" hole size Circulated

Spot 25 SK @ 1003 - 080
 2097 Spot 25 SK @ 2310 - 2097
 Spot 25 SK @ 3645 - 3442
 SPOT 25 SK @ 5100 - 4897

9⁵/₈" casing set at 2950' with 1500 SK of cement
 3442 Hole size 12¹/₄" Circulated

4097

CSG Leak @ 5778 - 6111 592 w/
 750 SK
 res 592 w/ 50 SK

35 SK plug @ 5742 - 6110

35 SK plug @ 7652 - 8020

CIBP @ 9475' + 25' cement

9528 perf 9528 - 9614

9614 5¹/₂" casing set at 9899' with 972 SK of cementTotal Depth 9899' Hole size 8³/₄" DV @ 5808DV tool failed perf 5¹/₂" @9818-20 592 w/ 500 SK
TOC 6280' by TS

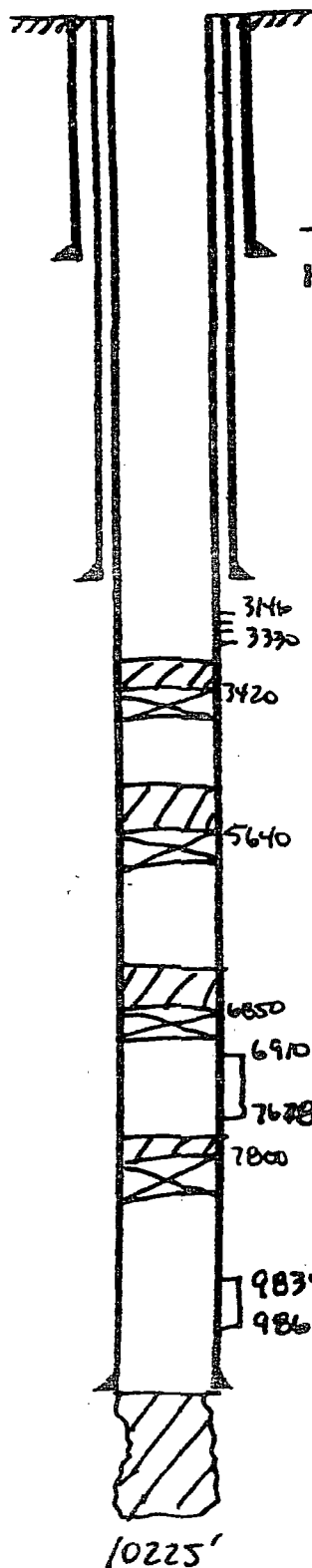
1st 570 SK TOC 6280'
 2nd 472 SK TOC 300'
 by TS

30-025-12473

OPERATOR	APACHE CORPORATION		DATE	2-14-2008
LEASE	State F Gas Com	WELL No	S	LOCATION Unit N 785 FSL + 1980 FWL

Sec 36-7195-R36E
Lea County NM

Active Eumant-Yates-SR-Queen



$13\frac{3}{8}$ " casing set at 187' with 200 sx of _____ cement
Hole size $17\frac{1}{2}$ " Circulated

Perf 3146 - 3330

CIBP @ 3420 + 25 SX cmt PBTD 3400'

$8\frac{5}{8}$ " casing set at 2400' with 1300 sx of _____ cement
Hole size 11" TOC by TS @ 1226'

Perf 3579 - 3756 SQZ w/ 100 SX

SQZ CSL LEAK @ 4447 - 4478 w/ 100 SX

CIBP @ 5640 + 25 SX cmt

Perf 5691 - 5711 SQZ w/ 125 SX

Perf 5620 - 5712 SQZ w/ 150 SX

CIBP @ 6850 + 25 SX cmt

Perf 6910 - 7201, 7562 - 7678

CIBP @ 7800' + 1 SX cmt

Perf 9834 - 9864

Perf 9834 - 9920 SQZ w/ 100 SX

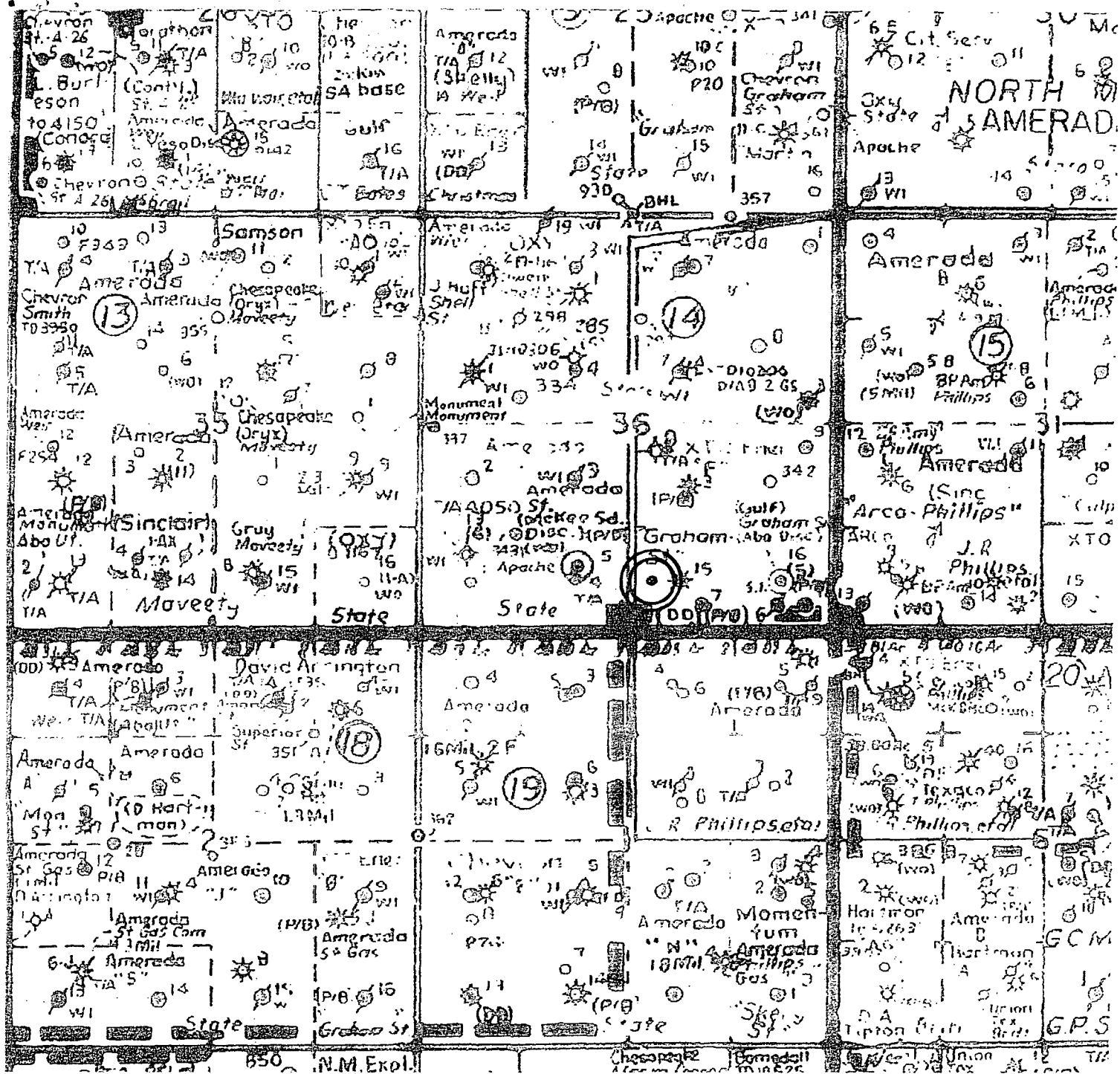
$5\frac{1}{2}$ " casing set at 9978' with 800 sx of _____ cement

Total Depth 10225' Hole size $7\frac{3}{4}$ " TOC by
TS @ 4480. Perf 4460 SQZ w/ 700 SX
TOC by TS 2544'

PBTD 3400'

Supplemental Information for Section VIII: Porosity and Volume Calculations

Gallons per Barrel	42.00
Gallons per Cubic Feet	7.48
Cubic Feet per Barrel	5.61
Low Barrels per Day	3500
High Barrels per Day	5000
Low Cubic Feet per Day	623.886
High Cubic Feet per Day	891.266
Acre-Foot (sq.ft.)	43560.00
Net Porosity Feet	18
Available Volume per Acre	784080
Low Rate Days per Acre	1256.77
High Rate Days per Acre	879.74
Low Rate Years per Acre	3.44
High Rate Years per Acre	2.41
Low Rate Acres per Year	0.291
High Rate Acres per Year	0.415
Low Rate - Acres for 30 Years	8.73
High Rate - Acres for 30 Years	12.45
Low Rate - Acres at 100% Safety Factor	17.46
High Rate - Acres at 100% Safety Factor	24.90
Radius (feet) at Low Rate	347.92
Radius (feet) at High Rate	415.48
100% Safety factor - Radius (feet) at Low Rate	492.03
100% Safety factor - Radius (feet) at High Rate	587.58



TARGA RESOURCES LLC

Calculated Area of Injection for the Monument AGI No. 1 Well

30 Year Low rate (3500 barrels per day) Injection Radius	347.92'
30 Year High rate (5000 barrels per day) Injection Radius	415.48'
30 Year Low rate (3500 barrels per day) Injection Radius 100% Safety Factor	492.03'
30 Year High rate (5000 barrels per day) Injection Radius 100% Safety Factor	587.58'

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name DISPOSAL WELL	Well Number
OGRID No.	Operator Name TARGA RESOURCES	Elevation 3571'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	19 S	36 E		662	SOUTH	2513	EAST	LEA

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	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

SURFACE LOCATION Lat.: N32°36'41.10" Long.: W103°18'26.39" SPC-N.: 587687.367 E.: 857267.418 (NAD-83) 662' 2513'	OPERATOR CERTIFICATION 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 _____ Date _____ Printed Name _____	
	SURVEYOR CERTIFICATION 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. MAY 19, 2008 Date Surveyed _____ Signature _____ Professional Seal _____ NO. 9779 Certificate No. Gary L. Jones 7977 BASIN SURVEYS	

LEA COUNTY,

NEW MEXICO.



150' NORTH
OFF SET

**TARGA RESOURCES
DISPOSAL WELL**
ELEV. - 3571'

132.20'

150' WEST
OFF SET

LAT. N: 32°36'41.10"
LONG. W: 103°18'26.39"
(NAD-83)

150' EAST
OFF SET

150' SOUTH
OFF SET

SE/4 SW/4

SW/4 SE/4

662.62'

B.C.

200 0 200 400 FEET

SCALE: 1" = 200'

TARGA RESOURCES

REF: DISPOSAL WELL / Well Pad Topo

DISPOSAL WELL LOCATED 662' FROM

THE SOUTH LINE AND 2513' FROM THE EAST LINE OF
SECTION 36, TOWNSHIP 19 SOUTH, RANGE 36 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.

Basin Surveys P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 19779

Drawn By: J. M. SMALL

Date: 05-21-2008 Disk: JMS 19779W

Survey Date: 05-19-2008

Sheet 1 of 1 Sheets