

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
JAN 23 2017

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
OCQA Artesia  
JAN 24 2017  
RECEIVED

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

**RECEIVED** SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. STEBBINS 20 FED 123H <b>315007</b>	
2. Name of Operator MATADOR PRODUCTION COMPANY		Contact: BRIAN WOOD Mail: BRIAN@PERMITSWEST.COM <b>228937</b>	9. API Well No. 30-015-43201 -
3a. Address 5400 LBJ FREEWAY SUITE 1500 DALLAS, TX 75240	3b. Phone No. (include area code) Ph: 505-466-8120	10. Field and Pool, or Exploratory BONE SPRING <b>98015</b>	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 20 T20S R29E Mer NMP NWSW 1693FSL 130FWL 32.556371 N Lat, 104.105360 W Lon		11. County or Parish, and State EDDY COUNTY, NM	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change to Original APD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Matador has acquired APD from Harvey E. Yates and plans these changes (described in more detail on ATTACHED DOCUMENTS):  
SHL will move 90' and BHL will move 390'.  
MD will change from 12575' to 12649'  
TVD (8018') stays the same.

*Accepted for record - NMOCD  
REP. 1-26-17*

*- Engineering review completed by m Hague. All previous COAs still apply  
- Location will be analyzed with future EA Stebbins 20 Fed 20-205-29E #123H, 133H, 115H, 203H*

*Approved by Bob Ballou 1-17-2017 EA # DOI-BLM-NM-P02-2017-0111*

14. I hereby certify that the foregoing is true and correct.  
Electronic Submission #357100 verified by the BLM Well Information System For MATADOR PRODUCTION COMPANY, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 11/08/2016 ()

Name (Printed/Typed) BRIAN WOOD	Title AGENT
Signature (Electronic Submission)	Date 11/04/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>[Signature]</i>	Title <i>RFM-land &amp; minerals</i>	Date <i>1/17/17</i>
Conditions of approval, if any, are attached. Approval of this notice 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.		Office <i>CFO</i>

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.

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Sante Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
Revised August 1, 2011  
Submit one copy to appropriate District Office  
JAN 23 2017  
RECEIVED  AMENDED REPORT

FORM C-102

**WELL LOCATION AND ACREAGE DEDICATION PLAT** Bone Spring 2nd Carb

<sup>1</sup> API Number 30-015-43201	<sup>2</sup> Pool Code 98015	<sup>3</sup> Pool Name WC-015 G-04 S202920D BONE SPRING*
<sup>4</sup> Property Code 315007	<sup>5</sup> Property Name STEBBINS 20 FED	<sup>6</sup> Well Number #123H
<sup>7</sup> OGRID No. 228937	<sup>8</sup> Operator Name MATADOR PRODUCTION COMPANY	<sup>9</sup> Elevation 3245'

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	20	20-S	29-E	-	1693'	SOUTH	130'	WEST	EDDY

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	20	20-S	29-E	-	1870'	SOUTH	240'	EAST	EDDY

<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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

<sup>16</sup>

<p><b>SURFACE LOCATION</b> NEW MEXICO EAST NAD 1927 X=570396 Y=566153 LAT.: N 32.5562535 LONG.: W 104.1048559 NAD 1983 X=611576 Y=566214 LAT.: N 32.5563719 LONG.: W 104.1053603 ELEV = 3245'</p>	<p><b>FIRST PERFORATION POINT</b> NEW MEXICO EAST NAD 1927 X=570596 Y=566329 LAT.: N 32.5567380 LONG.: W 104.1042068 NAD 1983 X=611776 Y=566390 LAT.: N 32.5568564 LONG.: W 104.1047112</p>	<p><b>LAST PERFORATION POINT</b> NEW MEXICO EAST NAD 1927 X=575225 Y=566325 LAT.: N 32.5566988 LONG.: W 104.0891804 NAD 1983 X=616405 Y=566386 LAT.: N 32.5568174 LONG.: W 104.0896844</p>	<p><b>BOTTOM HOLE LOCATION</b> NEW MEXICO EAST NAD 1927 X=575315 Y=566325 LAT.: N 32.5566981 LONG.: W 104.0888883 NAD 1983 X=616495 Y=566386 LAT.: N 32.5568167 LONG.: W 104.0893923</p>
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<sup>17</sup>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 undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well of the 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.

*Brian Wood*  
Signature  
Date 8-23-16

BRIAN WOOD

Printed Name  
brian@permitswest.com  
E-mail Address  
(505) 466-8120

<sup>18</sup>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 to the best of my belief.

04/06/2016  
Date of Survey

Signature and Seal of Professional Surveyor  
*Michael B. Brown*  
MICHAEL B. BROWN  
NEW MEXICO  
18389  
PROFESSIONAL SURVEYOR

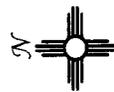
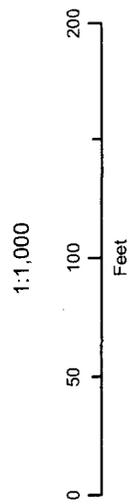
Certificate Number

# Matador Production Company

Stebbins Fed 20 #123H  
Old Yates Pad Overlap Map

Sec. 19 & 20, Township 20S, Range 29E  
Eddy County, New Mexico

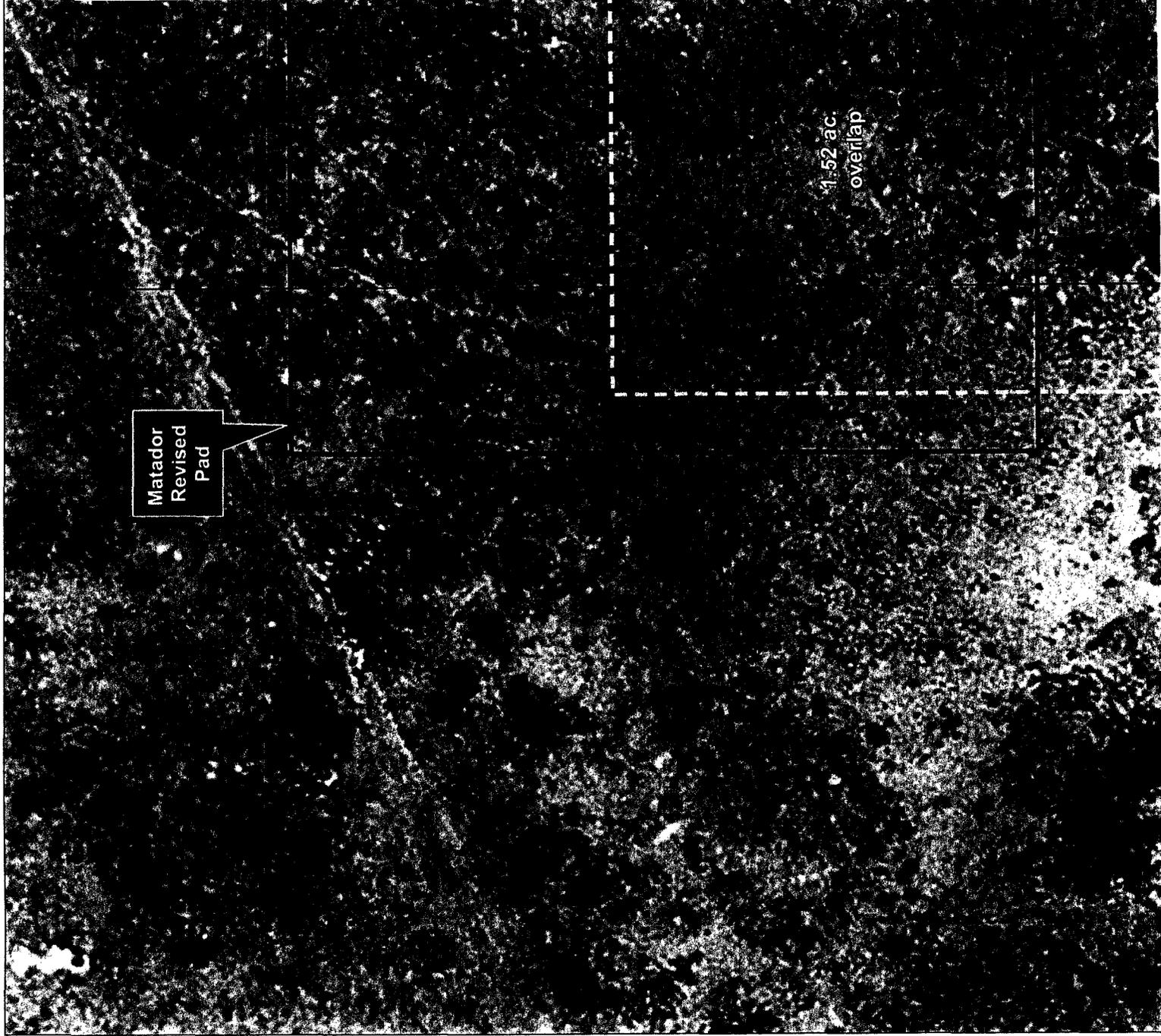
 Surface Hole Location



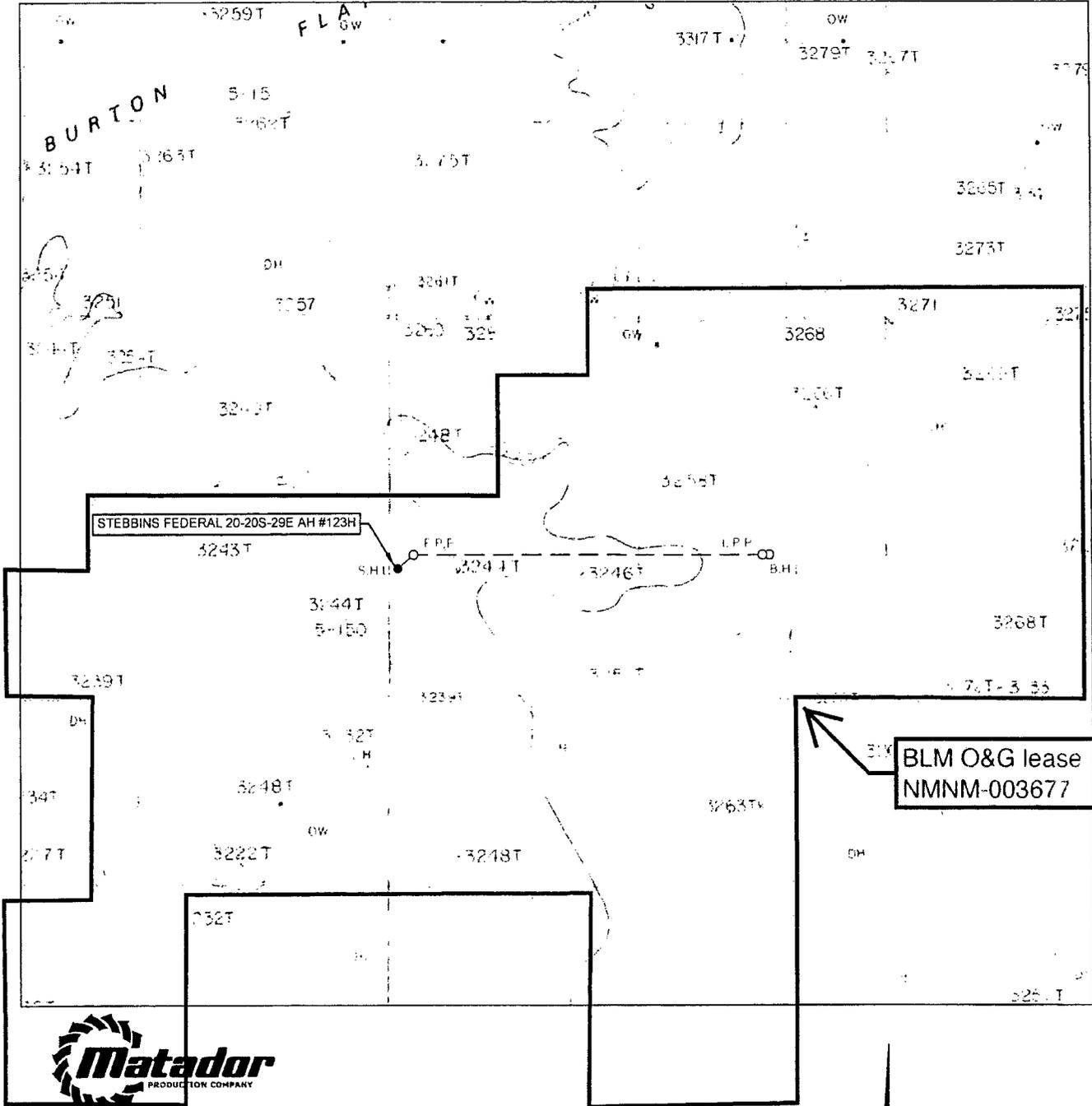
NAD 1927 New Mexico State Plane East  
FIPS 3001 Feet

**PERMITS WEST**  
PROVIDING PERMITS FOR LAND USERS

Prepared by Permits West, Inc., December 12, 2016  
for Matador Production Company



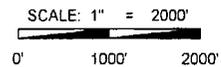
# LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: STEBBINS FEDERAL 20-20S-29E AH #123H

SECTION 20 TWP 20-S RGE 29-E SURVEY N.M.P.M.  
 COUNTY EDDY STATE NM ELEVATION 3245'  
 DESCRIPTION 1693' FSL & 130' FWL

LATITUDE N 32.5662535 LONGITUDE W 104.1048559



THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET.

WWW.TOPOGRAPHIC.COM

SCALE: 1" = 1000'  
 0' 500' 1000'



SECTION 20, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.  
 EDDY COUNTY, NEW MEXICO

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

17 FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

17 16  
 20 21



SURFACE LOCATION NEW MEXICO EAST	FIRST PERFORATION POINT NEW MEXICO EAST	LAST PERFORATION POINT NEW MEXICO EAST	BOTTOM HOLE LOCATION NEW MEXICO EAST
NAD 1927 X=570396 Y=566153	NAD 1927 X=570596 Y=566329	NAD 1927 X=575225 Y=566325	NAD 1927 X=575315 Y=566325
LAT.: N 32.5562535 LONG.: W 104.1048559	LAT.: N 32.5567380 LONG.: W 104.1042068	LAT.: N 32.5566988 LONG.: W 104.0891804	LAT.: N 32.5566981 LONG.: W 104.0888883
NAD 1983 X=611576 Y=566214	NAD 1983 X=611776 Y=566390	NAD 1983 X=616405 Y=566386	NAD 1983 X=616495 Y=566386
LAT.: N 32.5563719 LONG.: W 104.1053603	LAT.: N 32.5568564 LONG.: W 104.1047112	LAT.: N 32.5568174 LONG.: W 104.0896844	LAT.: N 32.5568167 LONG.: W 104.0893923
ELEV = 3245'			

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

19 20

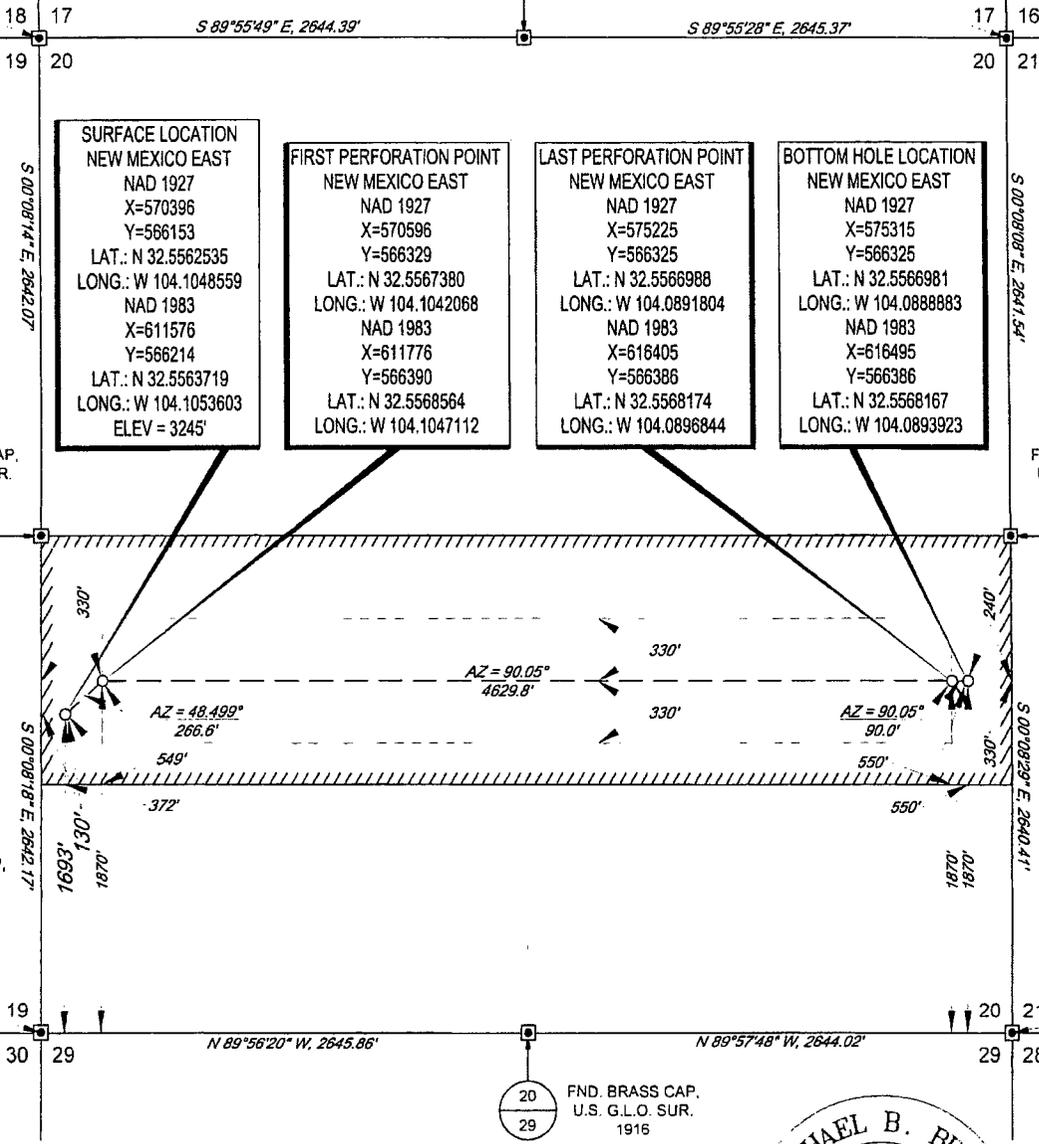
20 21

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

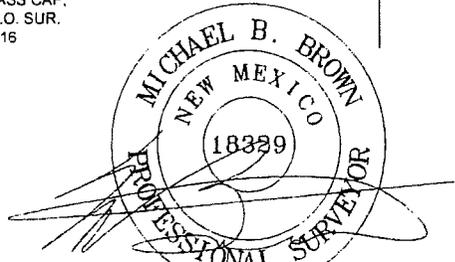
FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

19 20  
 30 29

20 21  
 30 29



LEASE NAME & WELL NO.: STEBBINS FEDERAL 20-20S-29E AH #123H  
 SECTION 20 TWP 20-S RGE 29-E SURVEY N.M.P.M.  
 COUNTY EDDY STATE NM  
 DESCRIPTION 1693' FSL & 130' FWL  
 DISTANCE & DIRECTION  
 FROM INT. OF US-285 AND US-180/US-62 E/W GREENE ST. GO EAST ON

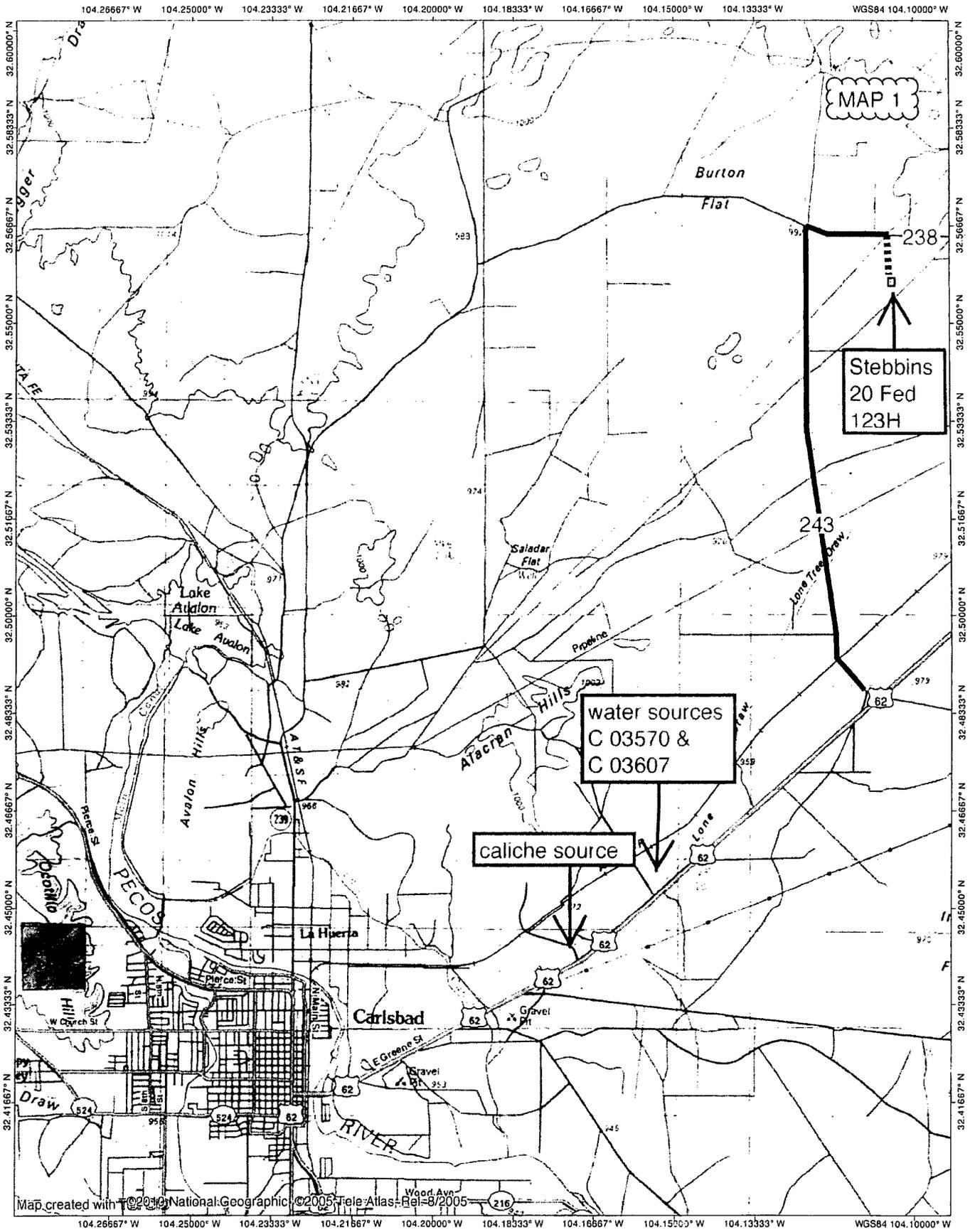


Michael Blake Brown, P.S. No. 18339  
 APRIL 12, 2016

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.  
 AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



WWW.TOPOGRAPHIC.COM



MAP 1

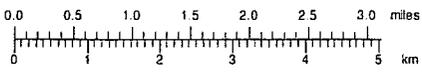
Stebbins  
20 Fed  
123H

water sources  
C 03570 &  
C 03607

caliche source

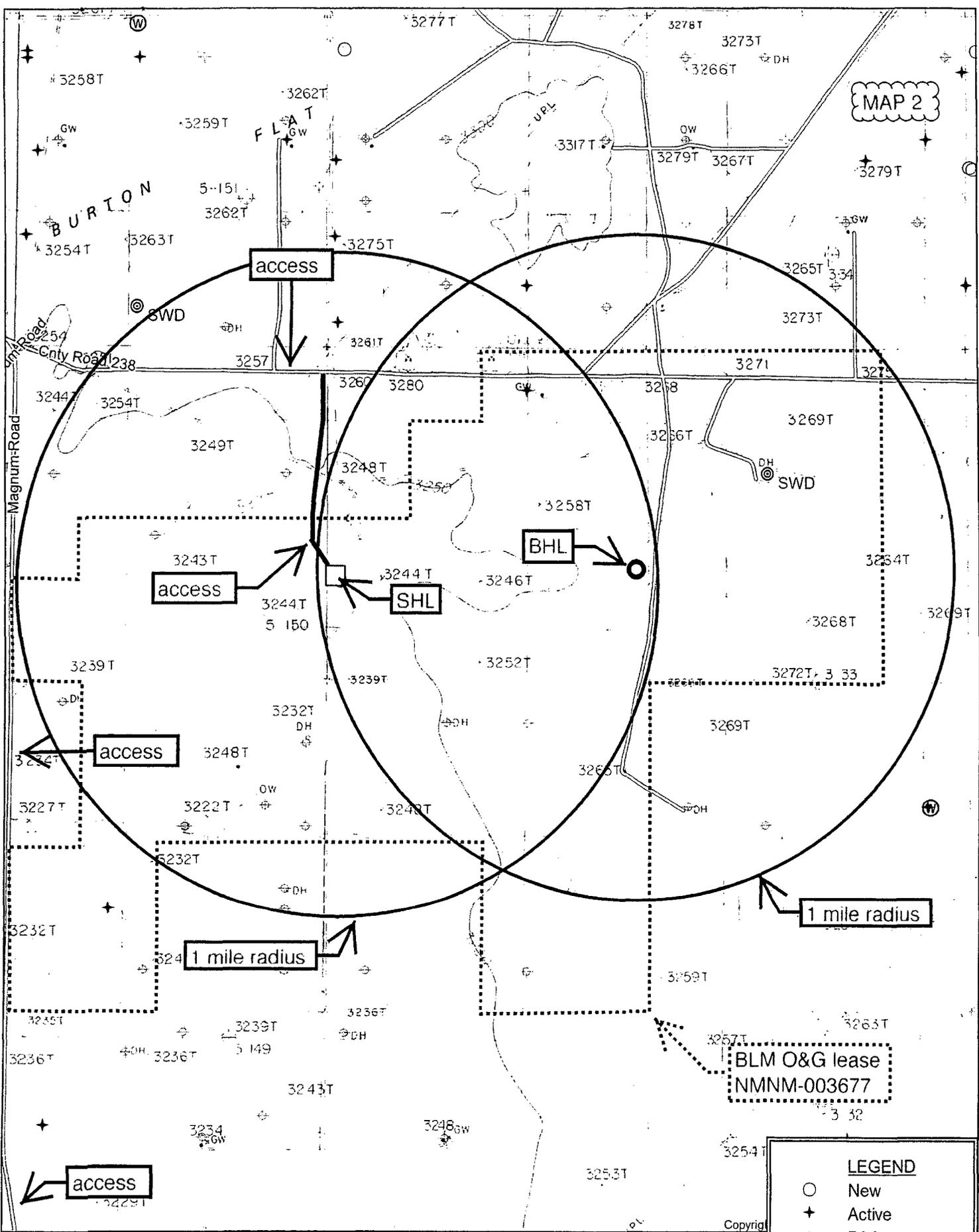
Map created with ©2010 National Geographic, ©2005, Fels Atlas, Rel-8/2005

NATIONAL  
GEOGRAPHIC



TN+1MN  
7.5°  
08/21/16

MAP 2



BLM O&G lease  
NMNM-003677

1 mile radius

access

SHL

BHL

access

1 mile radius

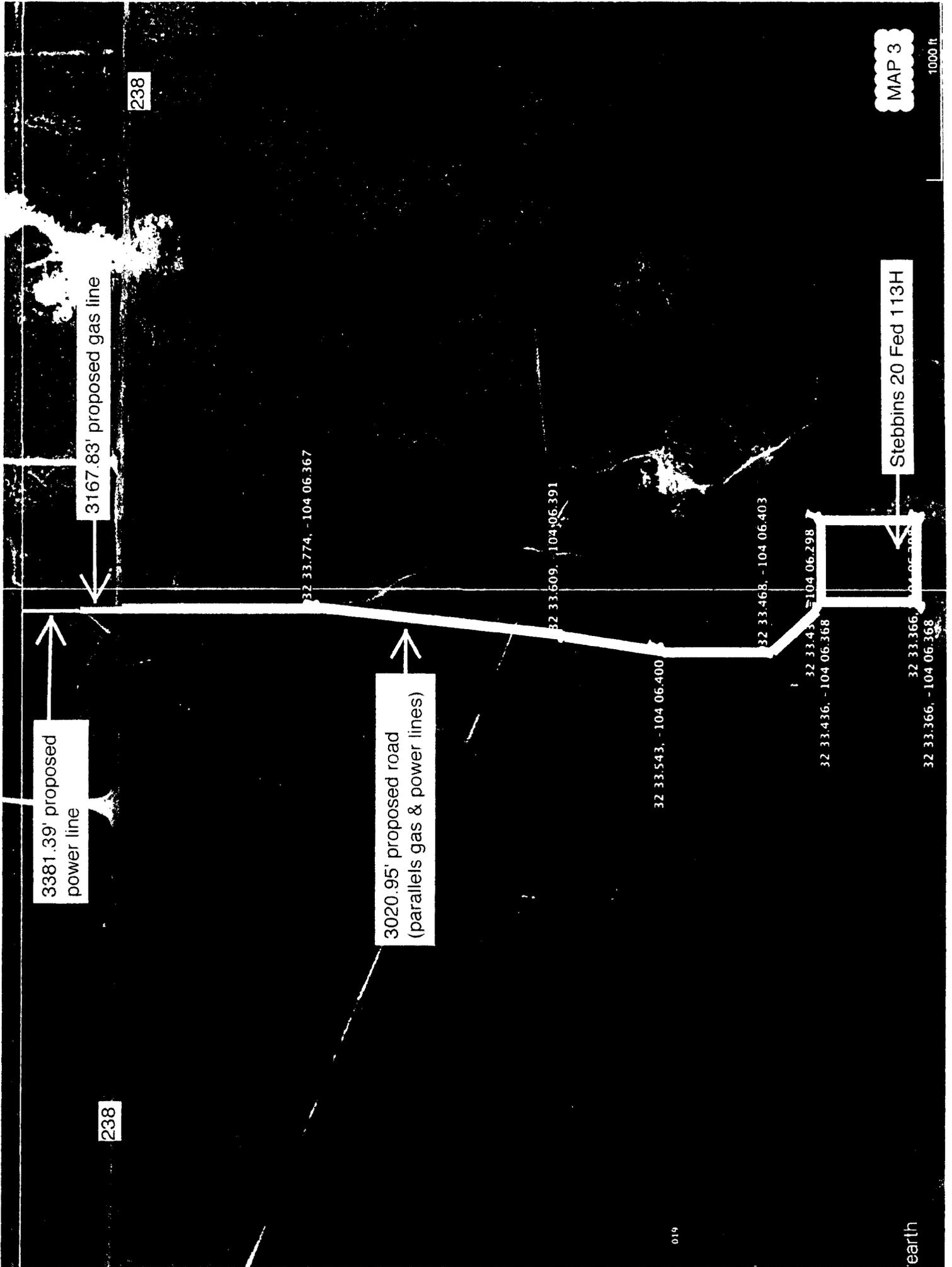
access

LEGEND	
○	New
+	Active
⊕	P&A
⊙	INJ
⊗	SWD
⊕	Water



Quad: ILLINOIS CAMP SE  
Scale: 1 inch = 2,000 ft.

Copyright



3381.39' proposed power line

3167.83' proposed gas line

3020.95' proposed road (parallels gas & power lines)

Stebbins 20 Fed 113H

238

238

32 33.774, - 104 06.367

32 33.609, - 104 06.391

32 33.543, - 104 06.400

32 33.468, - 104 06.403

32 33.433, - 104 06.298

32 33.436, - 104 06.368

32 33.366, - 104 06.308

32 33.366, - 104 06.368

MAP 3

1000 ft

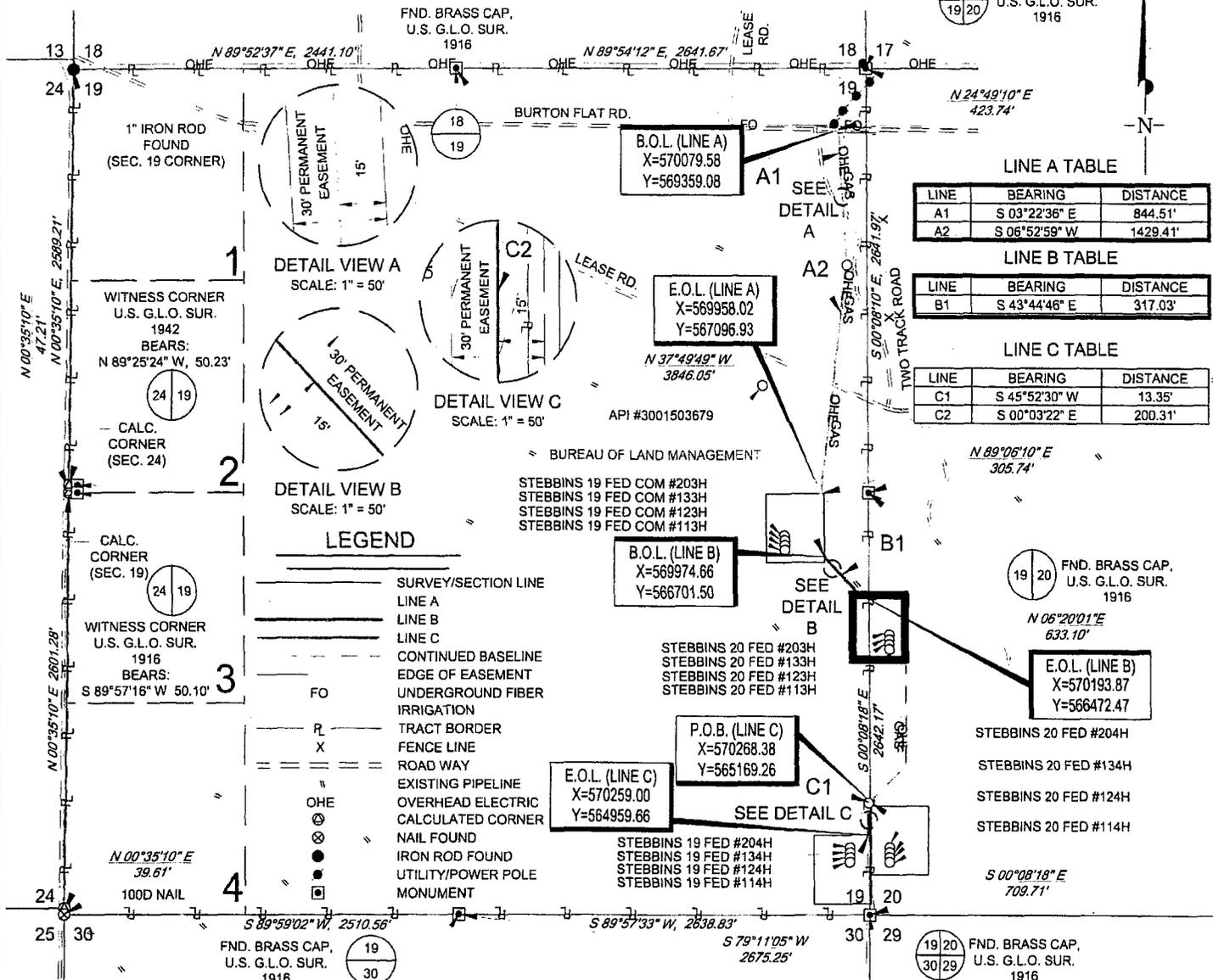
SECTION 19, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO

MAP 4

SCALE: 1" = 1000'

0' 500' 1000'

18 17 FND. BRASS CAP,  
19 20 U.S. G.L.O. SUR.  
1916



LINE A TABLE

LINE	BEARING	DISTANCE
A1	S 03°22'36" E	844.51'
A2	S 06°52'59" W	1429.41'

LINE B TABLE

LINE	BEARING	DISTANCE
B1	S 43°44'46" E	317.03'

LINE C TABLE

LINE	BEARING	DISTANCE
C1	S 45°52'30" W	13.35'
C2	S 00°03'22" E	200.31'

DETAIL VIEW A  
SCALE: 1" = 50'

DETAIL VIEW B  
SCALE: 1" = 50'

DETAIL VIEW C  
SCALE: 1" = 50'

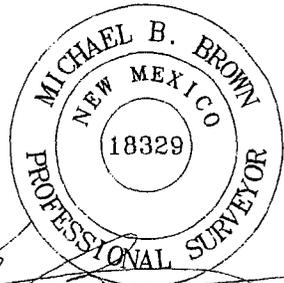
DETAIL VIEW B  
SCALE: 1" = 50'

LEGEND

- SURVEY/SECTION LINE
- LINE A
- LINE B
- LINE C
- CONTINUED BASELINE
- EDGE OF EASEMENT
- UNDERGROUND FIBER
- IRRIGATION
- FO — TRACT BORDER
- X — FENCE LINE
- ROAD WAY
- EXISTING PIPELINE
- OHE — OVERHEAD ELECTRIC
- CALCULATED CORNER
- NAIL FOUND
- IRON ROD FOUND
- UTILITY/POWER POLE
- MONUMENT

STEBBINS FED ROAD EASEMENT

Being a proposed road easement being 30 feet in width, 15 feet left, and 15 feet right of the above platted centerline total line footage containing 2804.61 feet or 169.98 rods, containing 1.93 acres more or less.



Michael Blake Brown, P.S. No. 18329  
SEPTEMBER 7, 2016



1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548  
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
TELEPHONE: (432) 682-1653 OR (800) 757-1653 • FAX (432) 682-1743  
WWW.TOPOGRAPHIC.COM

STEBBINS FED ROAD EASEMENT	REVISION:		NOTES:
	GJU	08/05/16	
	R.M.	08/23/16	2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
DATE: 06/30/16	A.V.F.	09/07/16	3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR PRODUCTION COMPANY, ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
FILE: EP STEBBINS FED ROAD EASEMENT SEC 19 REV3			4. B.O.L./P.O.B. = BEGINNING OF LINE/POINT OF BEGINNING
DRAWN BY: MML			5. E.O.L. = END OF LINE
SHEET: 1 OF 1			





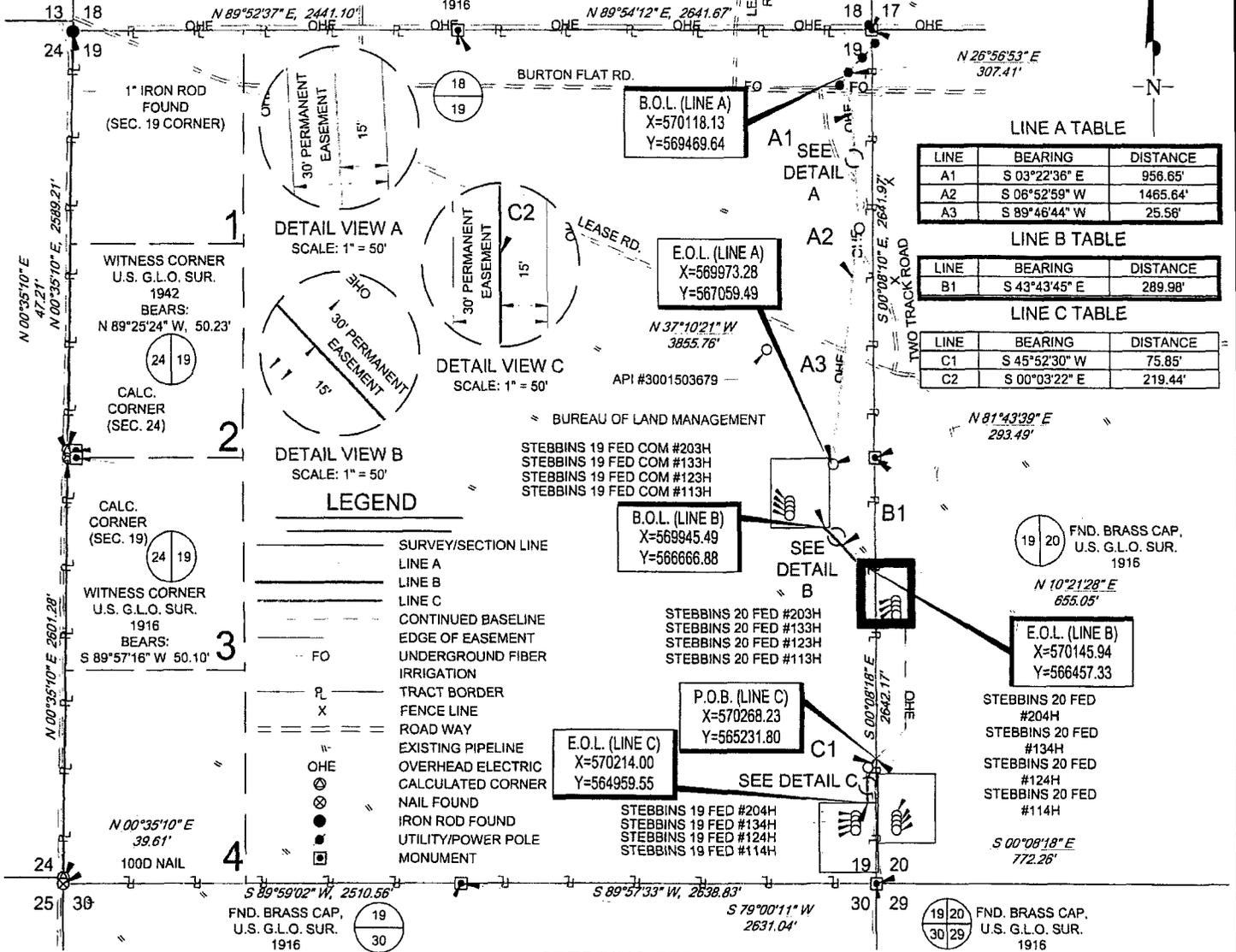
SCALE: 1" = 1000'  
 0' 500' 1000'

SECTION 19, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.  
 EDDY COUNTY, NEW MEXICO

MAP 7

18 17  
 19 20 FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916

FND. BRASS CAP.  
 U.S. G.L.O. SUR.  
 1916



LINE A TABLE

LINE	BEARING	DISTANCE
A1	S 03°22'36" E	956.65'
A2	S 06°52'59" W	1465.64'
A3	S 89°46'44" W	25.56'

LINE B TABLE

LINE	BEARING	DISTANCE
B1	S 43°43'45" E	289.98'

LINE C TABLE

LINE	BEARING	DISTANCE
C1	S 45°52'30" W	75.85'
C2	S 00°03'22" E	219.44'

DETAIL VIEW A  
 SCALE: 1" = 50'

DETAIL VIEW B  
 SCALE: 1" = 50'

DETAIL VIEW C  
 SCALE: 1" = 50'

LEGEND

- SURVEY/SECTION LINE
- LINE A
- LINE B
- LINE C
- CONTINUED BASELINE
- EDGE OF EASEMENT
- UNDERGROUND FIBER IRRIGATION
- FO
- TRACT BORDER
- FENCE LINE
- ROAD WAY
- EXISTING PIPELINE
- OVERHEAD ELECTRIC
- CALCULATED CORNER
- NAIL FOUND
- IRON ROD FOUND
- UTILITY/POWER POLE
- MONUMENT

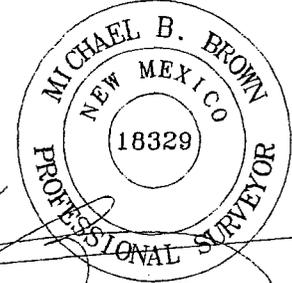
BUREAU OF LAND MANAGEMENT  
 STEBBINS 19 FED COM #203H  
 STEBBINS 19 FED COM #133H  
 STEBBINS 19 FED COM #123H  
 STEBBINS 19 FED COM #113H

STEBBINS 20 FED #203H  
 STEBBINS 20 FED #133H  
 STEBBINS 20 FED #123H  
 STEBBINS 20 FED #113H

STEBBINS 20 FED #204H  
 STEBBINS 20 FED #134H  
 STEBBINS 20 FED #124H  
 STEBBINS 20 FED #114H

STEBBINS FED  
 GAS LINE EASEMENT

Being a proposed gas sales easement being 30 feet in width, 15 feet left, and 15 feet right of the above plated centerline total line footage containing 3033.12 feet or 183.83 rods, containing 2.09 acres more or less.



Michael Blake Brown, P.S. No. 18329  
 SEPTEMBER 7, 2016



**TOPOGRAPHIC**  
 LOYALTY INNOVATION LEGACY  
 1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140  
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7548  
 2803 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
 TELEPHONE: (432) 682-1653 OR (800) 787-1653 • FAX (432) 682-1743  
 WWW.TOPOGRAPHIC.COM

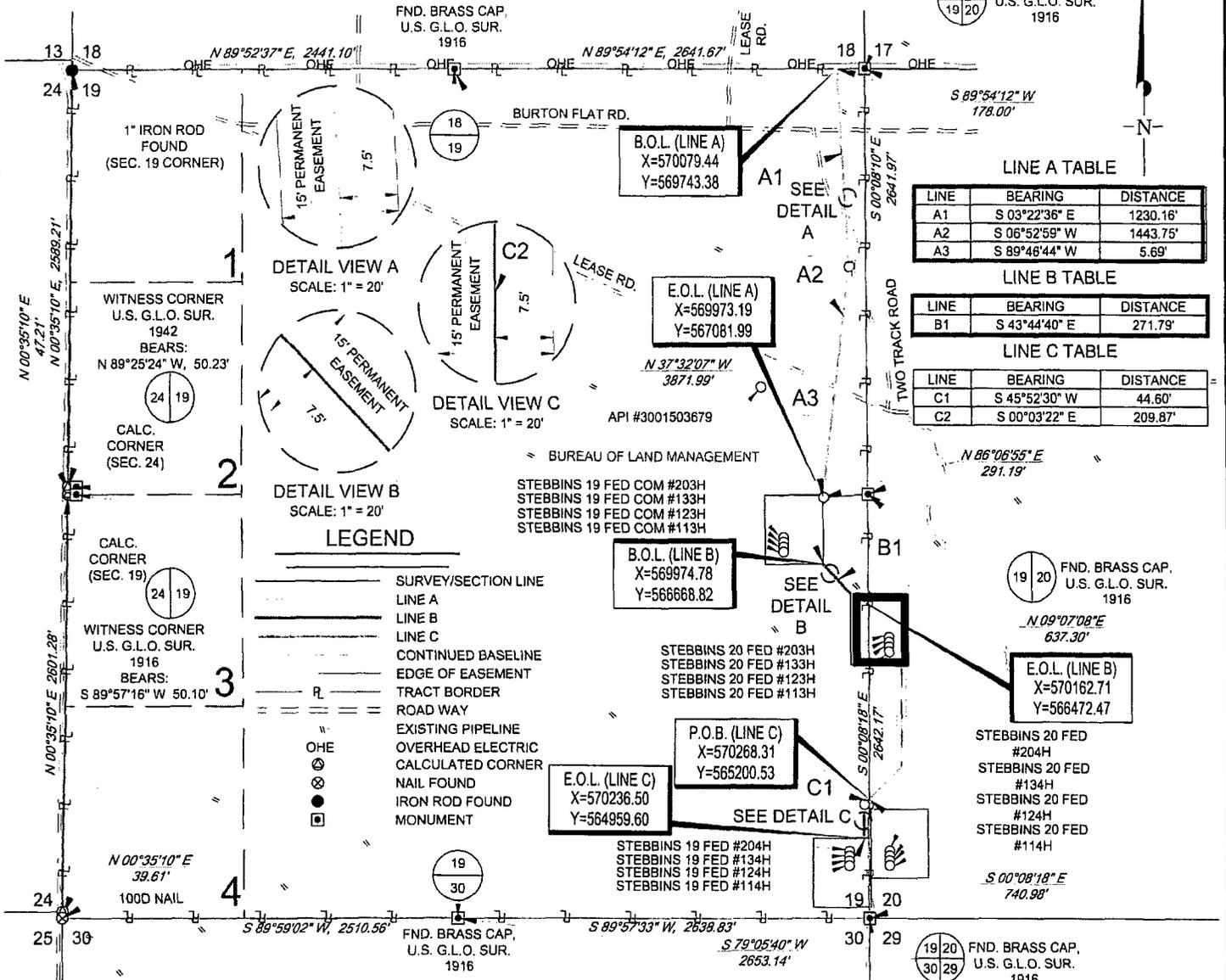
STEBBINS FED GAS LINE EASEMENT	REVISION:	
	GJU	08/05/16
	R.M.	08/24/16
DATE: 06/30/16	A.V.F.	09/07/16
FILE: EP STEBBINS FED GAS LINE EASEMENT SEC 19 REV3		
DRAWN BY: MML		
SHEET: 1 OF 1		

- NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
  2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
  3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
  4. B.O.L./P.O.B. = BEGINNING OF LINE/POINT OF BEGINNING
  5. E.O.L. = END OF LINE

SECTION 19, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO

SCALE: 1" = 1000'  
0' 500' 1000'

18 17  
19 20 FND. BRASS CAP.  
U.S. G.L.O. SUR.  
1916



**LINE A TABLE**

LINE	BEARING	DISTANCE
A1	S 03°22'36" E	1230.16'
A2	S 06°52'59" W	1443.75'
A3	S 89°46'44" W	5.69'

**LINE B TABLE**

LINE	BEARING	DISTANCE
B1	S 43°44'40" E	271.79'

**LINE C TABLE**

LINE	BEARING	DISTANCE
C1	S 45°52'30" W	44.60'
C2	S 00°03'22" E	209.87'

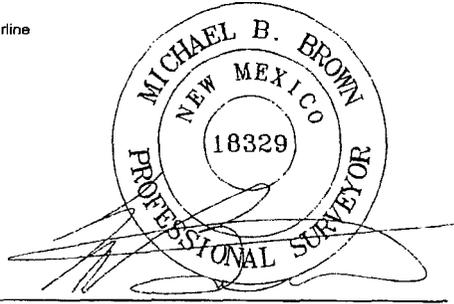
- LEGEND**
- SURVEY/SECTION LINE
  - LINE A
  - LINE B
  - LINE C
  - CONTINUED BASELINE
  - EDGE OF EASEMENT
  - TRACT BORDER
  - ROAD WAY
  - EXISTING PIPELINE
  - OVERHEAD ELECTRIC
  - CALCULATED CORNER
  - NAIL FOUND
  - IRON ROD FOUND
  - MONUMENT

**STEBBINS FED ELECTRICAL EASEMENT**

Being a proposed electrical line easement being 15 feet in width, 7.5 feet left, and 7.5 feet right of the above platted centerline total line footage containing 3205.86 feet or 194.29 rods, containing 1.10 acres more or less.



**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY  
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548  
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743  
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329  
SEPTEMBER 6, 2016

STEBBINS FED ELECTRICAL EASEMENT	REVISION:		NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927. 3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY. 4. B.O.L./P.O.B. = BEGINNING OF LINE/POINT OF BEGINNING 5. E.O.L. = END OF LINE
	GJU	08/05/16	
	R.M.	08/23/16	
DATE:	06/30/16	GLH	09/06/16
FILE:	EP_STEBBINS_FED_ELECTRICAL_EASEMENT_SEC_19_REV3		
DRAWN BY:	MML		
SHEET:	1 OF 1		

Matador Production Company  
Stebbins 20 Fed 123H

DRILL PLAN PAGE 1

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.  
BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.  
Eddy County, NM

Drilling Program

1. ESTIMATED TOPS

Formation Name	Est Top	Bearing
Quaternary	Surface	water
Salado/Salt	440	salt
Yates	950	gypsum
Seven Rivers	1250	dolomite
Capitan Reef	1340	water
Cherry Canyon	3130	hydrocarbons
Brushy Canyon	4260	hydrocarbons
Bone Spring Lime	5765	hydrocarbons
Bone Spring 1 <sup>st</sup> Carbonate	6450	hydrocarbons
Bone Spring 1st Sand	6940	hydrocarbons
Bone Spring 2nd Carbonate	7145	hydrocarbons & goal
	<b>MD</b>	<b>TVD</b>
<b>KOP</b>	<b>7376</b>	<b>7376</b>
Bone Spring 2nd Sand	8125	7930
BSPG - Pay Interval	8250	7950
BSPG2 Target Line	8267	8018
HZ BHL - PTD	12649	8018
Wolfcamp TVD	9170	hydrocarbons
Strawn TVD	10340	hydrocarbons
Pilot Hole TD (TVD & MD (still Strawn))	10550	hydrocarbons

2. NOTABLE ZONES

Second Bone Spring carbonate is the goal for this well. Hole will extend east of the last perforation point to allow for pump installation. All perforations will be  $\geq 330'$  from the dedication perimeter. Closest water well (C 03265) is 642' to the north. Depth to water was 52' in this now dry 89' deep well.

Matador Production Company

DRILL PLAN PAGE 2

Stebbins 20 Fed 123H

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

### 3. PRESSURE CONTROL

Matador requests a variance for a 2000 psi annular to be installed after running 20" surface casing. After the 20", a BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be installed. The BOP will be used below intermediate casing 1 to TD. See attached BOP and choke diagrams.

An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.

Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required in Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs. Test pressures will be as follows: Intermediate casing 1 pressure tests will be made to 250 psi low and 2000 psi high. Intermediate casing 2 pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 2500 psi high on the intermediate casing 1 and 250 psi low and 2500 psi high on the intermediate 2 casing. In the case of running a speed head with landing mandrel for 9-5/8" casing, initial intermediate 1 casing test pressures will be 250 psi low and 3000 psi high, with wellhead seals tested to 5000 psi once the 9-5/8" casing has been landed and cemented.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

### 4. CASING & CEMENT

A vertical pilot hole will be drilled to 10550', logged, and then plugged back. Plugging details follow in the cement table.

Matador Production Company

DRILL PLAN PAGE 3

Stebbins 20 Fed 123H

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

Hole O. D.	Set @ (MD)	Casing O. D.	Age	Weight (lb/ft)	Grade	Thread Collar	Collapse	Burst	Tension
26"	400'	20"	New	94	H-40	BTC	1.125	1.125	1.8
17.5"	1200'	13.375"	New	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	3100'	9.625"	New	40	J-55	BTC	1.125	1.125	1.8
8.75"	12649'	5.5"	New	20	P-110	BTC/TXP	1.125	1.125	1.8

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	564	1.82	1026	12.8	Class C + Bentonite + 2% CaCl <sub>2</sub> + 3% NaCl + LCM
	Tail	146	1.38	201	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2.III.B.1f	
Intermediate 1	Lead	1286	2.09	2688	12.6	Class C + Bentonite + 1% CaCl <sub>2</sub> + 8% NaCl + LCM
	Tail	193	1.38	266	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th jt to GL	
Intermediate 2	Lead	1181	2.09	2468	12.6	Class C + Bentonite + 1% CaCl <sub>2</sub> + 8% NaCl + LCM
	Tail	183	1.38	253	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (500' above TOC)	
Production	Lead	1157	2.25	2603	11.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	250	1.38	345	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 1217'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every 3rd jt to top of curve	
Bottom Hole Plug		570	1.05	599	16.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 9117'					Additional Additives as recommended by cement company	

no cement  
-SEE COA

Matador Production Company  
Stebbins 20 Fed 123H

DRILL PLAN PAGE 4

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.  
BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.  
Eddy County, NM

Kick Off Plug	225	1.05	236	16.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 7180'	Btm of Cmt Plug @ 7742'			Additional Additives as recommended by cement company	

### 5. MUD PROGRAM

An electronic Pason mud monitoring system satisfying the requirements of Onshore Order 1 will be used. All necessary mud products for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

Name	Hole Size	Mud Weight	Visc	Fluid Loss	Type Mud
Surface	26"	8.30	28	NC	FW Spud Mud
Intermediate 1	17.5"	10.00	30-32	NC	Brine Water
Intermediate 2	12.25"	8.3	28	NC	FW Spud Mud
Production	8.75"	9.00	30-32	NC	FW/Cut Brine

### 6. CORES, TESTS, & LOGS

No drill stem test is planned.

A 2-person mud-logging program will be used from ≈1200' to TD.

E-Logs and possible rotary sidewall core are planned from intermediate 1 casing shoe to pilot hole TD. GR will be collected through the MWD tools from intermediate 2 casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

Matador Production Company

DRILL PLAN PAGE 5

Stebbins 20 Fed 123H

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

#### 7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is  $\approx$ 3855 psi. Expected bottom hole temperature is  $\approx$ 135° F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H<sub>2</sub>S from the surface to the Bone Spring to meet the BLM's minimum requirements for the submission of an "H<sub>2</sub>S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since Matador has an H<sub>2</sub>S safety package on all wells, an "H<sub>2</sub>S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

#### 8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take  $\approx$ 3 months to drill and complete the well.

Matador Production Company owns the majority working interest in this well. Per its discussions with its potential partners, Matador will be named operator upon execution of the final Operating Agreements signed by the partners or the issuance of a pooling order by the State.



Project: Eddy County, NM (NAD27 NIME)  
 Site: Stebbins Federal 20-20S-29E AH  
 Well: 123H  
 Wellbore: OH  
 Design: Plan 2 08-31-15  
 Rig: Patterson 809



**SECTION DETAILS**

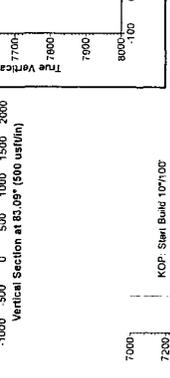
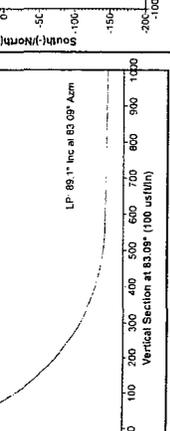
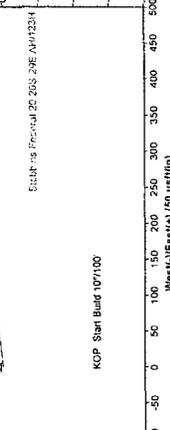
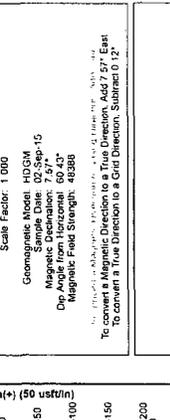
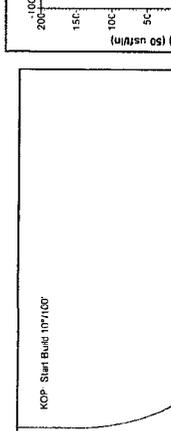
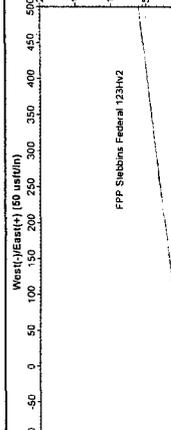
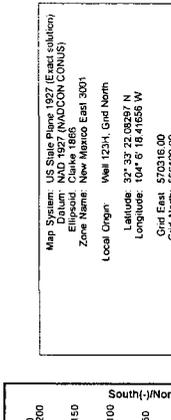
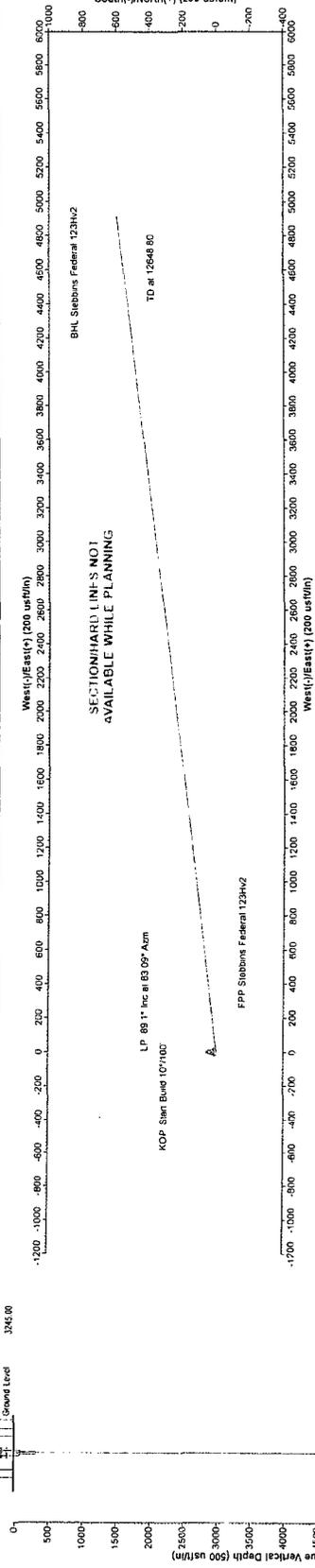
Sec	TD	Inc	Adj	TVD	W-S	E-W	Obs	T-Obs	W-Set	Target	Amend
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP Start Build 107100'
2	2372.29	8.00	0.00	2372.29	0.00	0.00	0.00	0.00	0.00	0.00	KOP Start Build 107100'
3	19243.60	88.10	61.10	6110.00	855.00	60250.00	0.00	0.00	0.00	0.00	BHL Stebbins Federal 123H/2

**WELL DETAILS**

Coord Level	3245.00
North	570716.00
East	37.33 22.02827 N
Longitude	104° 5' 18.41655 W

**DESIGN TARGET DETAILS**

Name	TVD	W-S	E-W	North	East	Longitude	Shape
FFF Stebbins Federal 123H/2	0.00	33.00	263.00	566142.00	510579.00	37° 33' 22.02827 N	Point
BHL Stebbins Federal 123H/2	8018.00	995.00	4908.00	566704.00	512525.00	104° 5' 18.41655 W	Point



Map System: US State Plane 1983 (Easting, Northing)  
 Datum: NAD 1983 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone Name: New Mexico East 3001  
 Local Origin: Well 123H, Grid North  
 Latitude: 37° 33' 22.02827 N  
 Longitude: 104° 5' 18.41655 W  
 Grid East: 570716.00  
 Grid North: 566704.00  
 Scale Factor: 1.000  
 Geometric Model: HDGM  
 Sample Date: 02-Sep-15  
 Magnetic Declination: 7.97°  
 Dip: 8.00°  
 Magnetic Field Strength: 48389

To convert a Magnetic Direction to a True Direction, Add 7.97° East  
 To convert a True Direction to a Grid Direction, Subtract 0.12°

**LEGEND**



NM OIL CONSERVATION  
ARTESIA DISTRICT  
JAN 23 2017

RECEIVED

## Matador Resources

Eddy County, NM (NAD27 NME)  
Stebbins Federal 20-20S-29E AH  
123H

OH

Plan: Plan 2 08-31-15

## Standard Planning Report

31 August, 2015





**Phoenix Technology Services LP**  
Planning Report



<b>Database:</b>	Compass 5000 GCR	<b>Local Co-ordinate Reference:</b>	Well 123H
<b>Company:</b>	Matador Resources	<b>TVD Reference:</b>	RKB @ 3273.00usft (Patterson 809)
<b>Project:</b>	Eddy County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3273.00usft (Patterson 809)
<b>Site:</b>	Stebbins Federal 20-20S-29E AH	<b>North Reference:</b>	Grid
<b>Well:</b>	123H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2 08-31-15		

<b>Project</b>	Eddy County, NM (NAD27 NME)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

**Site** Stebbins Federal 20-20S-29E AH

<b>Site Position:</b>		<b>Northing:</b>	566,109.00 usft	<b>Latitude:</b>	32° 33' 22.08297 N
<b>From:</b>	Map	<b>Easting:</b>	570,316.00 usft	<b>Longitude:</b>	104° 6' 18.41656 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.12 °

**Well** 123H

<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	566,109.00 usft	<b>Latitude:</b>	32° 33' 22.08297 N
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	570,316.00 usft	<b>Longitude:</b>	104° 6' 18.41656 W
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	0.00 usft	<b>Ground Level:</b>	3,245.00 usft

**Wellbore** OH

<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	HDGM	9/2/2015	7.57	60.43	48,388

**Design** Plan 2 08-31-15

**Audit Notes:**

**Version:** Phase: PLAN Tie On Depth: 0.00

<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	83.09

**Plan Sections**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,376.29	0.00	0.00	7,376.29	0.00	0.00	0.00	0.00	0.00	0.00	
8,267.29	89.10	83.09	7,949.18	67.86	559.86	10.00	10.00	0.00	83.09	
12,648.80	89.10	83.09	8,018.00	595.00	4,909.00	0.00	0.00	0.00	0.00	BHL Stebbins Federa



# Phoenix Technology Services LP

## Planning Report



**Database:** Compass 5000 GCR  
**Company:** Matador Resources  
**Project:** Eddy County, NM (NAD27 NME)  
**Site:** Stebbins Federal 20-20S-29E AH  
**Well:** 123H  
**Wellbore:** OH  
**Design:** Plan 2 08-31-15

**Local Co-ordinate Reference:** Well 123H  
**TVD Reference:** RKB @ 3273.00usft (Patterson 809)  
**MD Reference:** RKB @ 3273.00usft (Patterson 809)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,376.29	0.00	0.00	7,376.29	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP: Start Build 10°/100'</b>									
7,400.00	2.37	83.09	7,399.99	0.06	0.49	0.49	10.00	10.00	0.00
7,500.00	12.37	83.09	7,499.04	1.60	13.21	13.30	10.00	10.00	0.00
7,600.00	22.37	83.09	7,594.36	5.19	42.81	43.12	10.00	10.00	0.00
7,700.00	32.37	83.09	7,683.05	10.71	88.39	89.04	10.00	10.00	0.00
7,800.00	42.37	83.09	7,762.42	18.01	148.57	149.66	10.00	10.00	0.00
7,900.00	52.37	83.09	7,830.06	26.85	221.52	223.14	10.00	10.00	0.00
8,000.00	62.37	83.09	7,883.91	36.97	305.02	307.25	10.00	10.00	0.00
8,100.00	72.37	83.09	7,922.34	48.06	396.53	399.44	10.00	10.00	0.00
8,200.00	82.37	83.09	7,944.18	59.79	493.28	496.89	10.00	10.00	0.00
8,267.29	89.10	83.09	7,949.18	67.86	559.86	563.96	10.00	10.00	0.00
<b>LP: 89.1° Inc at 83.09° Azm</b>									
8,300.00	89.10	83.09	7,949.69	71.79	592.33	596.66	0.00	0.00	0.00
8,400.00	89.10	83.09	7,951.26	83.82	691.59	696.65	0.00	0.00	0.00
8,500.00	89.10	83.09	7,952.83	95.86	790.85	796.64	0.00	0.00	0.00
8,600.00	89.10	83.09	7,954.40	107.89	890.11	896.63	0.00	0.00	0.00
8,700.00	89.10	83.09	7,955.98	119.92	989.37	996.61	0.00	0.00	0.00
8,800.00	89.10	83.09	7,957.55	131.95	1,088.63	1,096.60	0.00	0.00	0.00
8,900.00	89.10	83.09	7,959.12	143.98	1,187.90	1,196.59	0.00	0.00	0.00
9,000.00	89.10	83.09	7,960.69	156.01	1,287.16	1,296.58	0.00	0.00	0.00
9,100.00	89.10	83.09	7,962.26	168.04	1,386.42	1,396.56	0.00	0.00	0.00
9,200.00	89.10	83.09	7,963.83	180.07	1,485.68	1,496.55	0.00	0.00	0.00
9,300.00	89.10	83.09	7,965.40	192.10	1,584.94	1,596.54	0.00	0.00	0.00
9,400.00	89.10	83.09	7,966.97	204.14	1,684.20	1,696.53	0.00	0.00	0.00
9,500.00	89.10	83.09	7,968.54	216.17	1,783.46	1,796.52	0.00	0.00	0.00
9,600.00	89.10	83.09	7,970.11	228.20	1,882.72	1,896.50	0.00	0.00	0.00
9,700.00	89.10	83.09	7,971.68	240.23	1,981.98	1,996.49	0.00	0.00	0.00
9,800.00	89.10	83.09	7,973.25	252.26	2,081.25	2,096.48	0.00	0.00	0.00
9,900.00	89.10	83.09	7,974.82	264.29	2,180.51	2,196.47	0.00	0.00	0.00
10,000.00	89.10	83.09	7,976.39	276.32	2,279.77	2,296.45	0.00	0.00	0.00
10,100.00	89.10	83.09	7,977.97	288.35	2,379.03	2,396.44	0.00	0.00	0.00
10,200.00	89.10	83.09	7,979.54	300.38	2,478.29	2,496.43	0.00	0.00	0.00
10,300.00	89.10	83.09	7,981.11	312.41	2,577.55	2,596.42	0.00	0.00	0.00
10,400.00	89.10	83.09	7,982.68	324.45	2,676.81	2,696.40	0.00	0.00	0.00
10,500.00	89.10	83.09	7,984.25	336.48	2,776.07	2,796.39	0.00	0.00	0.00
10,600.00	89.10	83.09	7,985.82	348.51	2,875.34	2,896.38	0.00	0.00	0.00
10,700.00	89.10	83.09	7,987.39	360.54	2,974.60	2,996.37	0.00	0.00	0.00
10,800.00	89.10	83.09	7,988.96	372.57	3,073.86	3,096.35	0.00	0.00	0.00
10,900.00	89.10	83.09	7,990.53	384.60	3,173.12	3,196.34	0.00	0.00	0.00
11,000.00	89.10	83.09	7,992.10	396.63	3,272.38	3,296.33	0.00	0.00	0.00
11,100.00	89.10	83.09	7,993.67	408.66	3,371.64	3,396.32	0.00	0.00	0.00
11,200.00	89.10	83.09	7,995.24	420.69	3,470.90	3,496.31	0.00	0.00	0.00
11,300.00	89.10	83.09	7,996.81	432.73	3,570.16	3,596.29	0.00	0.00	0.00
11,400.00	89.10	83.09	7,998.38	444.76	3,669.43	3,696.28	0.00	0.00	0.00
11,500.00	89.10	83.09	7,999.96	456.79	3,768.69	3,796.27	0.00	0.00	0.00
11,600.00	89.10	83.09	8,001.53	468.82	3,867.95	3,896.26	0.00	0.00	0.00
11,700.00	89.10	83.09	8,003.10	480.85	3,967.21	3,996.24	0.00	0.00	0.00
11,800.00	89.10	83.09	8,004.67	492.88	4,066.47	4,096.23	0.00	0.00	0.00
11,900.00	89.10	83.09	8,006.24	504.91	4,165.73	4,196.22	0.00	0.00	0.00
12,000.00	89.10	83.09	8,007.81	516.94	4,264.99	4,296.21	0.00	0.00	0.00
12,100.00	89.10	83.09	8,009.38	528.97	4,364.25	4,396.19	0.00	0.00	0.00
12,200.00	89.10	83.09	8,010.95	541.00	4,463.52	4,496.18	0.00	0.00	0.00



**Phoenix Technology Services LP**  
Planning Report



Database: Compass 5000 GCR  
 Company: Matador Resources  
 Project: Eddy County, NM (NAD27 NME)  
 Site: Stebbins Federal 20-20S-29E AH  
 Well: 123H  
 Wellbore: OH  
 Design: Plan 2 08-31-15

Local Co-ordinate Reference: Well 123H  
 TVD Reference: RKB @ 3273.00usft (Patterson 809)  
 MD Reference: RKB @ 3273.00usft (Patterson 809)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,300.00	89.10	83.09	8,012.52	553.04	4,562.78	4,596.17	0.00	0.00	0.00
12,400.00	89.10	83.09	8,014.09	565.07	4,662.04	4,696.16	0.00	0.00	0.00
12,500.00	89.10	83.09	8,015.66	577.10	4,761.30	4,796.14	0.00	0.00	0.00
12,600.00	89.10	83.09	8,017.23	589.13	4,860.56	4,896.13	0.00	0.00	0.00
12,648.80	89.10	83.09	8,018.00	595.00	4,909.00	4,944.93	0.00	0.00	0.00
<b>TD at 12648.80</b>									

**Design Targets**

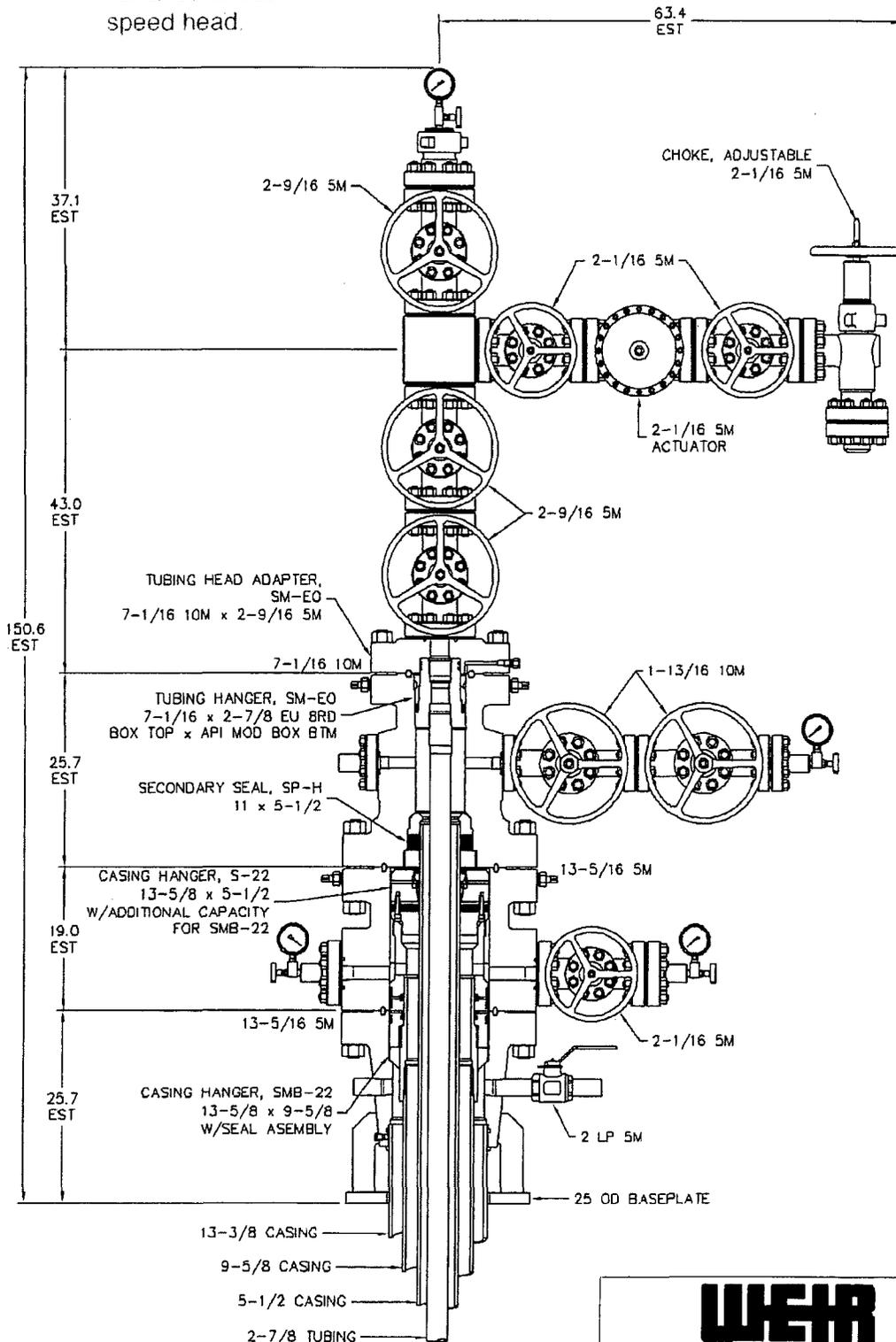
**Target Name**

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
FPP Stebbins Federal 1:	0.00	0.00	0.00	33.00	263.00	566,142.00	570,579.00	32° 33' 22.40394 N	104° 6' 15.34282 W
- plan misses target center by 265.06usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
BHL Stebbins Federal 1:	0.00	0.00	8,018.00	595.00	4,909.00	566,704.00	575,225.00	32° 33' 27.86319 N	104° 5' 21.04351 W
- plan hits target center									
- Point									

**Plan Annotations**

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
7,376.29	7,376.29	0.00	0.00	KOP: Start Build 10°/100'
8,267.29	7,949.18	67.86	559.86	LP: 89.1° Inc at 83.09° Azm
12,648.80	8,018.00	595.00	4,909.00	TD at 12648.80

Matador requesting  
variance to use  
speed head.



**NOTE:**  
DIMENSIONS SHOWN ON THIS DRAWING ARE  
ESTIMATES ONLY AND CAN VARY SIGNIFICANTLY  
DEPENDING ON RAW MATERIAL LENGTHS.  
NO GUARANTEE OF STACKUP HEIGHT IS IMPLIED.  
DIMENSIONS SHOWN SHOULD BE CONSIDERED  
FOR REFERENCE PURPOSES ONLY.

**RESTRICTED CONFIDENTIAL DOCUMENT**  
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HEREON WILL BE MADE TO A THIRD PARTY WITHOUT PRIOR WRITTEN  
CONSENT OF SEABOARD INTERNATIONAL INC.



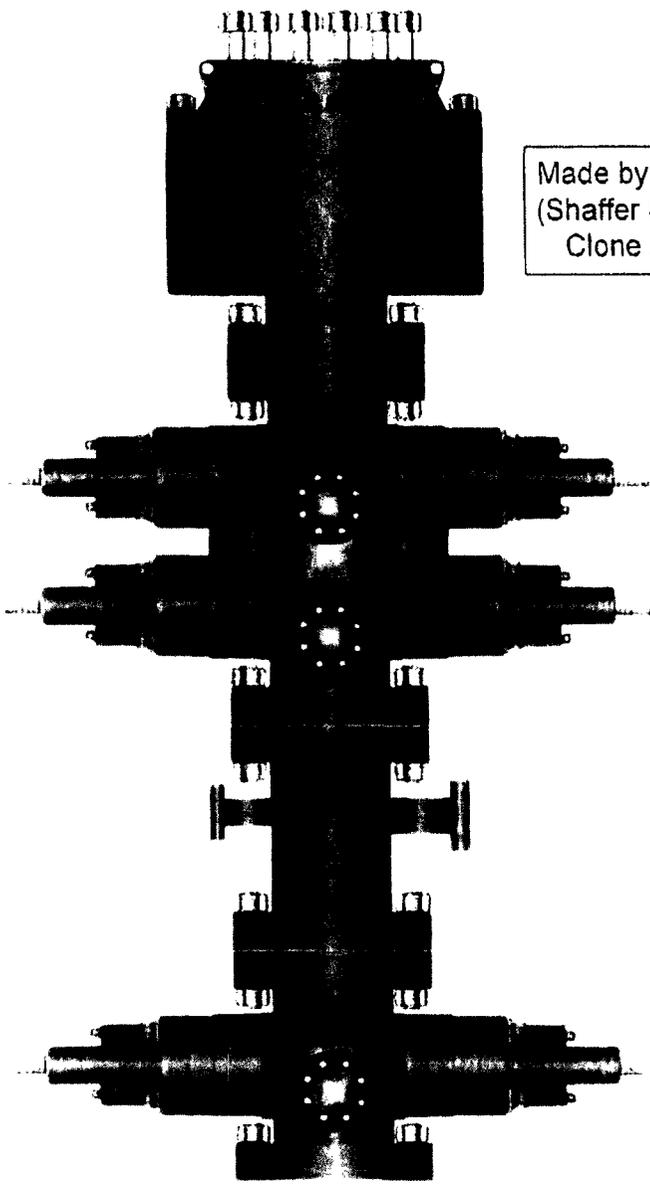
5,000 PSI WELLHEAD ASSEMBLY  
13-3/8 x 9-5/8 x 5-1/2 x 2-7/8

DRAWN BY: RPL	SCALE: 1:13	DATE: 17APR15	REV:
CHECKED BY:	DRAWING NO. QD-000475		
APPROVED BY:			



# PATTERSON-UTI

Well Control



Made by Cameron  
(Shaffer Spherical)  
Clone Annular

PATTERSON-UTI # PS2-628  
STYLE: New Shaffer Spherical  
BORE 13 5/8" PRESSURE 5,000  
HEIGHT: 48 1/2" WEIGHT: 13,800 lbs

PATTERSON-UTI # PC2-128  
STYLE: New Cameron Type U  
BORE 13 5/8" PRESSURE 10,000  
RAMS: TOP 5" Pipe BTM Blinds  
HEIGHT: 66 5/8" WEIGHT: 24,000 lbs

Length 40" Outlets 4" 10M  
DSA 4" 10M x 2" 10M

PATTERSON-UTI # PC2-228  
STYLE: New Cameron Type U  
BORE 13 5/8" PRESSURE 10,000  
RAMS: 5" Pipe  
HEIGHT: 41 5/8" WEIGHT: 13,000 lbs

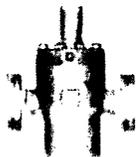
2" Minimum Kill Line

### WING VALVES

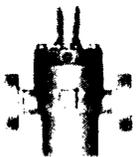
3" Minimum Choke Line



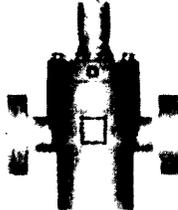
2" Check Valve



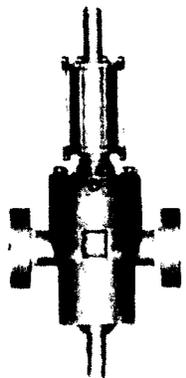
2" Manual Valve



2" Manual Valve



4" Manual Valve



4" Hydraulic Valve

Connection: TenarisXP® BTC  
 Casing/Tubing: CAS  
 Coupling Option: REGULAR

Size: 5.500 in.  
 Wall: 0.361 in.  
 Weight: 20.00 lbs/ft  
 Grade: P110-IC  
 Min. Wall Thickness: 87.5 %

**PIPE BODY DATA**  
**GEOMETRY**

Nominal OD	5.500 in.	Nominal Weight	20.00 lbs/ft	Standard Drift Diameter	4.653 in.
Nominal ID	4.778 in.	Wall Thickness	0.361 in.	Special Drift Diameter	N/A
Plain End Weight	19.83 lbs/ft				

**PERFORMANCE**

Body Yield Strength	641 1000 lbs	Internal Yield	12630 psi	SMYS	110000 psi
Collapse	12100 psi				

**TENARISXP® BTC CONNECTION DATA**  
**GEOMETRY**

Connection OD	6.100 in.	Coupling Length	9.450 in.	Connection ID	4.766 in.
Critical Section Area	5.828 sq. in.	Threads per in.	5.00	Make-Up Loss	4.204 in.

**PERFORMANCE**

Tension Efficiency	100 %	Joint Yield Strength	641 x 1000 lbs	Internal Pressure Capacity <sup>1</sup>	12630 psi
Structural Compression Efficiency	100 %	Structural Compression Strength	641 x 1000 lbs	Structural Bending <sup>2</sup>	92 %/100 ft
External Pressure Capacity	12100 psi				

**ESTIMATED MAKE-UP TORQUES<sup>(3)</sup>**

Minimum	11270 ft-lbs	Optimum	12520 ft-lbs	Maximum	13770 ft-lbs
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**OPERATIONAL LIMIT TORQUES**

Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs
------------------	--------------	--------------	--------------

**BLANKING DIMENSIONS**

Blanking Dimensions





Midwest Hose & Specialty, Inc.

# Internal Hydrostatic Test Graph

March 10, 2015

Customer: Patterson B&E

Pick Ticket #: 296283

### Hose Specifications

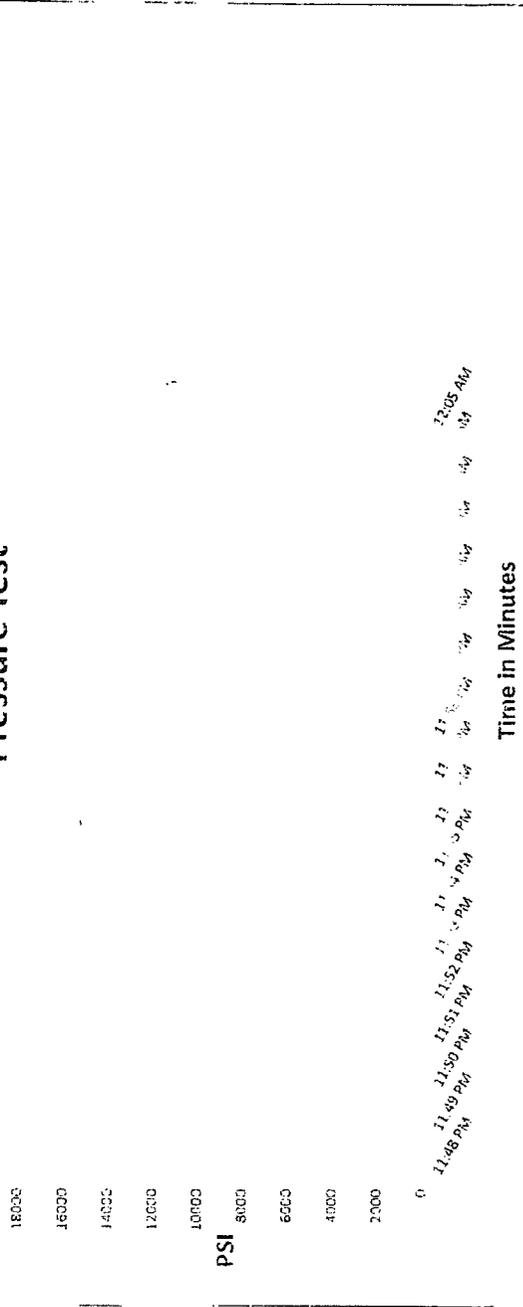
Hose Type: 10000 PSI  
Material: LD  
ID: 2"  
Working Pressure: 10000 PSI

Length: 50'  
O.D.: 3.47"  
Burst Pressure: Standard Specification: 14000 PSI

### Verification

Type of Fitting: 2" 1502  
Die Size: 97MM  
Hose Serial #: 11839  
Coupling Method: Swage  
Final O.D.: 4.03"  
Hose Assembly Serial #: 296283

## Pressure Test



Test Pressure: 15000 PSI      Time Held at Test Pressure: 17 3/4 Minutes      Actual Burst Pressure: 15363 PSI      Peak Pressure: 15363 PSI

Comments: Hose assembly pressure tested with water at ambient temperature

Tested By: Richard Davis

Approved By: Ryan Adams



Midwest Hose  
& Specialty, Inc.

### Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	3/10/2015	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	245805	Hose Lot # and Date Code	11839-11/14
Customer Purchase Order #	270590	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	296283	Hose O.D. (Inches)	3.99"
Hose Assembly Length	50'	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R7.0X32M1502	Stem (Part and Revision #)	RF2.0 32F1502
Stem (Heat #)	14104546	Stem (Heat #)	A144853
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection (Flange Hammer Union Part)		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)	2" 1502 H2S	Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	17 3/4		
Date Tested	Tested By	Approved By	
3/10/2015			



Midwest Hose  
& Specialty, Inc.

### Certificate of Conformity

Customer: PATTERSON B&E

Customer P.O.# 270590

Sales Order # 245805

Date Assembled: 3/10/2015

### Specifications

Hose Assembly Type: Choke & Kill

Assembly Serial # 296283

Hose Lot # and Date Code 11839-11/14

Hose Working Pressure (psi) 10000

Test Pressure (psi) 15000

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:

Midwest Hose & Specialty, Inc.

3312 S I-35 Service Rd

Oklahoma City, OK 73129

Comments:

Approved By

Date

3/19/2015



Midwest Hose & Specialty, Inc.

# Internal Hydrostatic Test Graph

Customer: Patterson

Pick Ticket #: 286159

### Hose Specifications

**Hose Type**  
CK

**I.D.**  
2"

**Working Pressure**  
10000 PSI

**Length**  
50'

**O.D.**  
3.55"

**Burst Pressure**  
Standard Spec. 15000 PSI

### Verification

**Type of Fitting**  
2" 1502

**Die Size**  
97MM

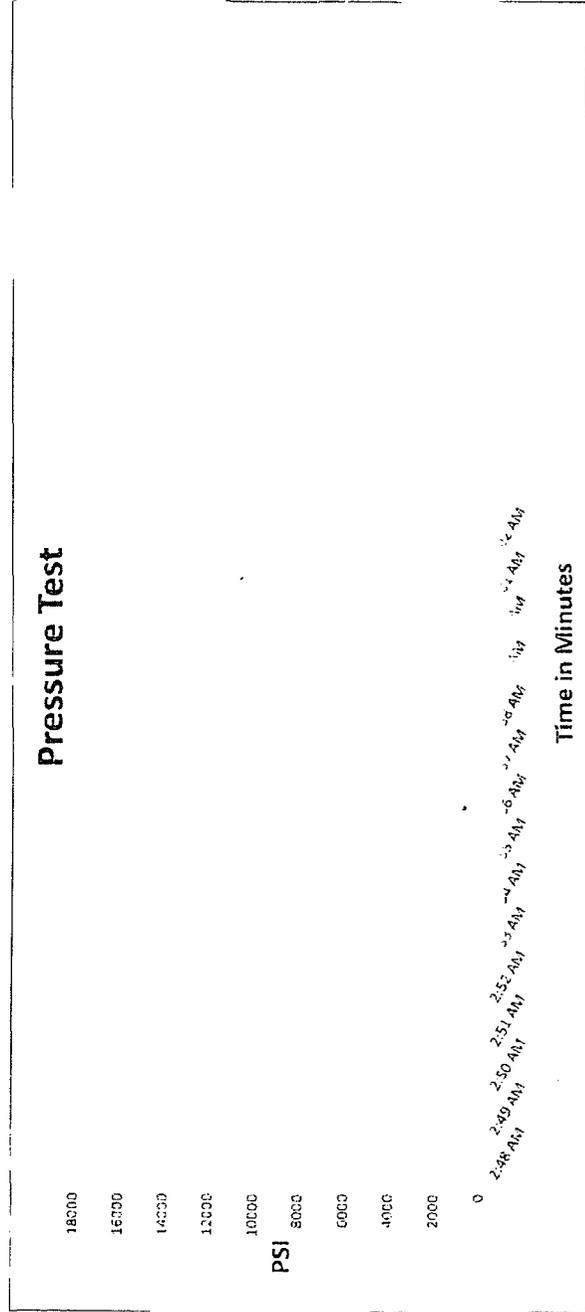
**Hose Serial #**  
11784

**Coupling Method**  
Swaive

**Final O.D.**  
3.98"

**Hose Assembly Serial #**  
286159

## Pressure Test



**Test Pressure** 15000 PSI  
**Time Held at Test Pressure** 15 1/4 Minutes  
**Actual Burst Pressure**  
**Peak Pressure** 15410 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Tyler Hill

Approved By: Ryan Adams

R 809 · Check in Wells  
 Hassan  
 December 24, 2014



Midwest Hose  
& Specialty, Inc.

### Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	12/23/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	237566	Hose Lot # and Date Code	11784-10/14
Customer Purchase Order #	261581	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	286159	Hose O.D. (Inches)	4.00"
Hose Assembly Length	50'	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R2.0X32M1502	Stem (Part and Revision #)	R2.0X32M1502
Stem (Heat #)	M14104546	Stem (Heat #)	M14101226
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection (Flange Hammer Union Part #)	2"1502	Connection (Part #)	
Connection (Heat #)	2866	Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	15 1/4		
Date Tested	Tested By	Approved By	
12/24/2014	<i>Tyler Hill</i>	<i>Gar Adams</i>	



Midwest Hose  
& Specialty, Inc.

### Certificate of Conformity

Customer: **PATTERSON B&E**

Customer P.O.# **261581**

Sales Order # **237566**

Date Assembled: **12/23/2014**

### Specifications

Hose Assembly Type: **Choke & Kill**

Assembly Serial # **286159**

Hose Lot # and Date Code **11784-10/14**

Hose Working Pressure (psi) **10000**

Test Pressure (psi) **15000**

*We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.*

Supplier:

**Midwest Hose & Specialty, Inc.**

**3312 S I-35 Service Rd**

**Oklahoma City, OK 73129**

Comments:

Approved By

Date

**12/29/2014**



Midwest Hose  
& Specialty, Inc.

### Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	PATTERSON B&E	Hose Assembly Type	Choke & Kill
MWH Sales Representative	AMY WHITE	Certification	API 7K/FSL Level 2
Date Assembled	3/10/2015	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	245805	Hose Lot # and Date Code	11839-11/14
Customer Purchase Order #	270590	Hose I.D. (Inches)	2"
Assembly Serial # (Pick Ticket #)	296283	Hose O.D. (Inches)	3.99"
Hose Assembly Length	50'	Armor (yes/no)	YES

#### FITTINGS

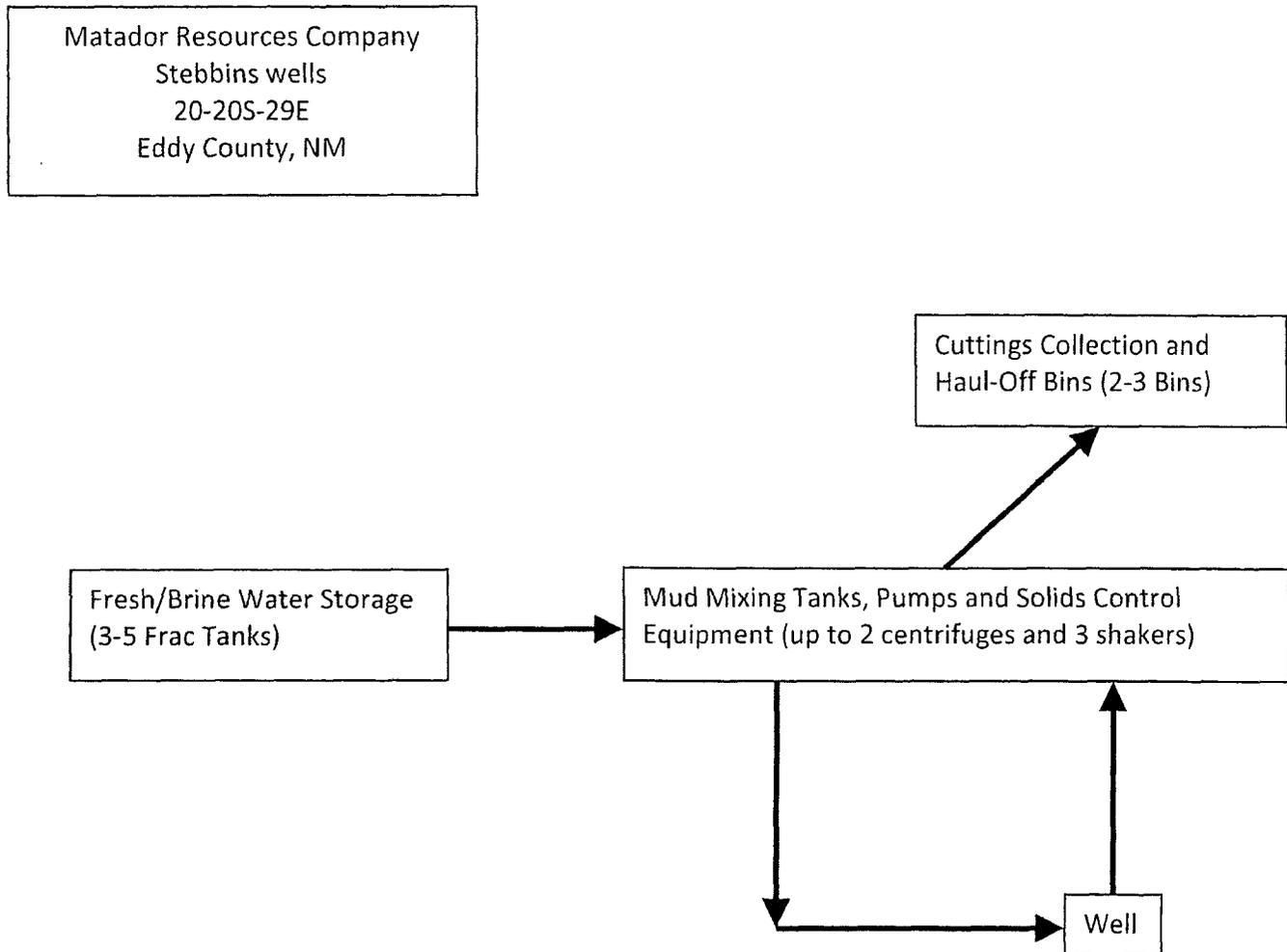
End A		End B	
Stem (Part and Revision #)	R2.0X32M1502	Stem (Part and Revision #)	RF2.0 32F1502
Stem (Heat #)	14104546	Stem (Heat #)	A144853
Ferrule (Part and Revision #)	RF2.0 10K	Ferrule (Part and Revision #)	RF2.0 10K
Ferrule (Heat #)	41044	Ferrule (Heat #)	41044
Connection . Flange Hammer Union Part		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)	2" 1502 H25	Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	97MM	Dies Used	97MM

#### Hydrostatic Test Requirements

Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.
Test Pressure Hold Time (minutes)	17 3/4	

Date Tested	Tested By	Approved By
3/10/2015		

## Closed-Loop System

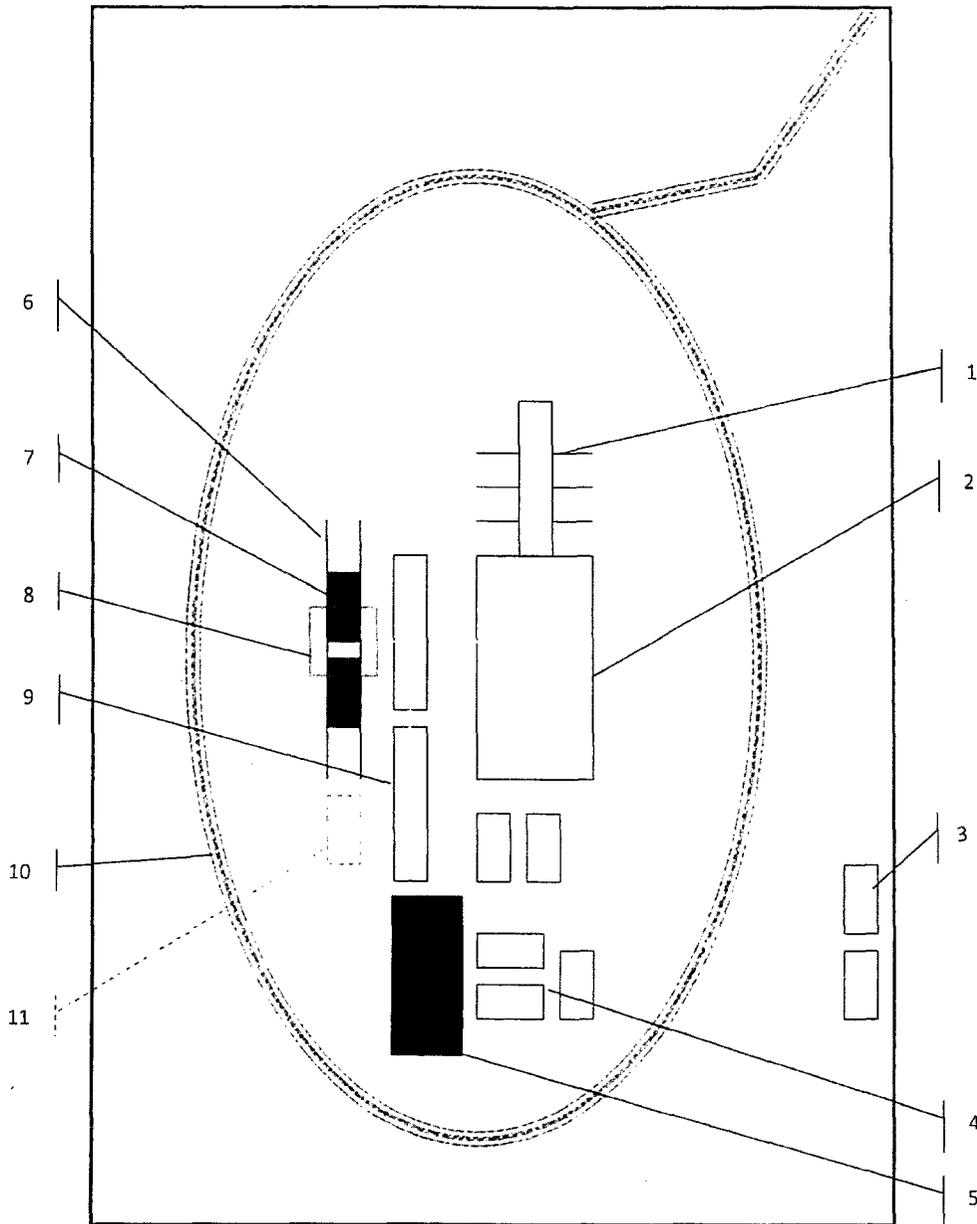


### Operating and Maintenance Plan:

During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluids and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

### Closure Plan:

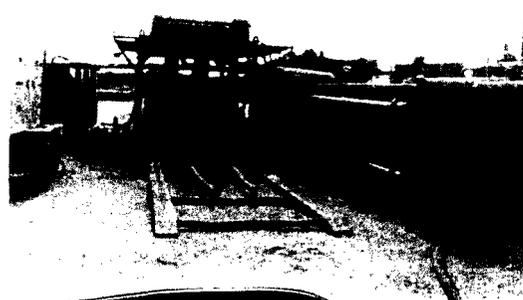
During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.



**Schematic Closed Loop Drilling Rig\***

1. Pipe Rack
2. Drill Rig
3. House Trailers/ Offices
4. Generator/Fuel/Storage
5. Overflow-Frac Tank
6. Skids
7. Roll Offs
8. Hopper or Centrifuge
9. Mud Tanks
10. Loop Drive
11. Generator (only for use with centrifuge)

\*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

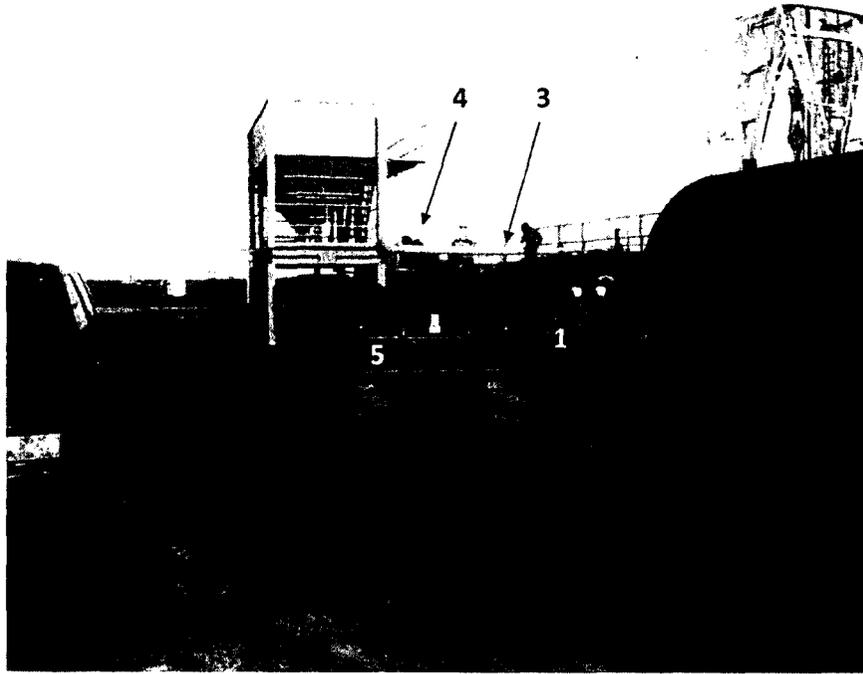


Above: Centrifugal Closed Loop System

**PERMITS WEST** INC.

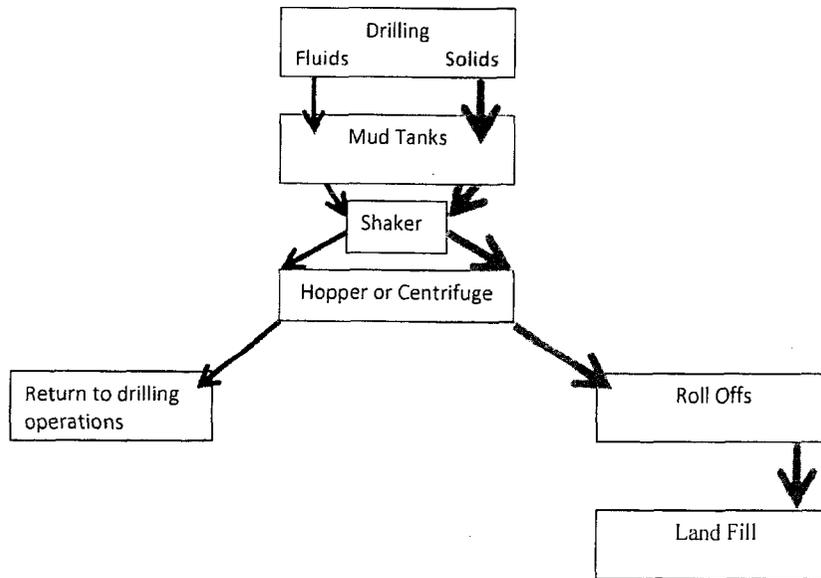
PROVIDING PERMITS for LAND USERS

17Verano Loop, Santa Fe, New Mexico 87508 505-466-8120



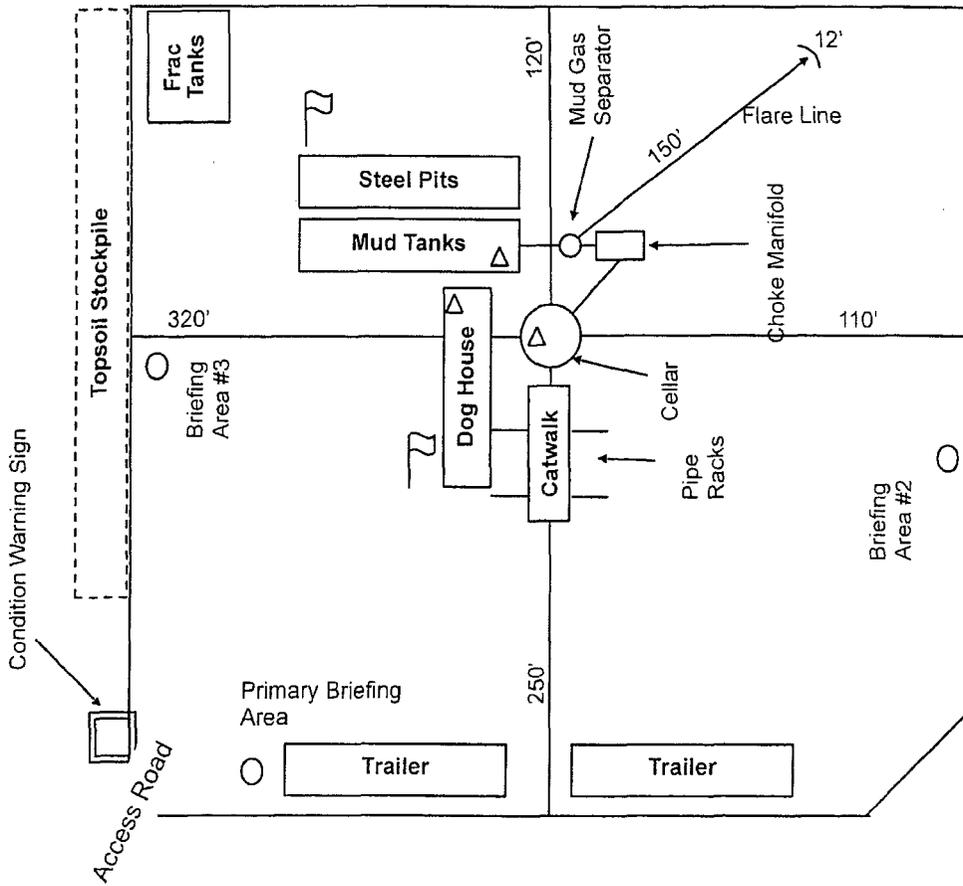
Closed Loop Drilling System: Mud tanks to right (1)  
 Hopper in air to settle out solids (2)  
 Water return pipe (3)  
 Shaker between hopper and mud tanks (4)  
 Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil  
 Field Service

# Rig Diagram



Wind Direction Indicator

△ H2S Monitors

○ Briefing Areas

← Prevailing Winds

Stebbins 20 Fed 123H  
 SHL 1693' FSL & 130' FWL  
 BHL 1870' FSL & 240' FEL  
 20-20S-29E  
 Eddy County, NM





## Hydrogen Sulfide Drilling

### Operations Plan

#### Matador Resources

#### 1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system, and briefing areas
- Evacuation procedures, routes, and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30-minute pressure demand air packs.

#### 2 H2S Detection and Alarm Systems:

- H2S sensor/detectors will be located on the drilling rig floor, in the base of the sub structure / cellar area, and on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary.
- An audio alarm system will be installed on the derrick floor and in the doghouse.

#### 3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible.
- Windsock on the rig floor and / top of doghouse should be high enough to be visible.

#### 4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
  - Green Flag – Normal Safe Operation Condition
  - Yellow Flag – Potential Pressure and Danger
  - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

#### 5 Well Control Equipment:

- See APD

#### 6 Communication:

- While working under masks, chalkboards will be used for communications.
- Hand signals will be used where chalkboard is inappropriate.
- Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.



7 Drill Stem Testing:

- No DST or cores are planned at this time.

8 Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubulars good and other mechanical equipment.

9 If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers if necessary.

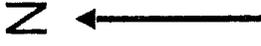
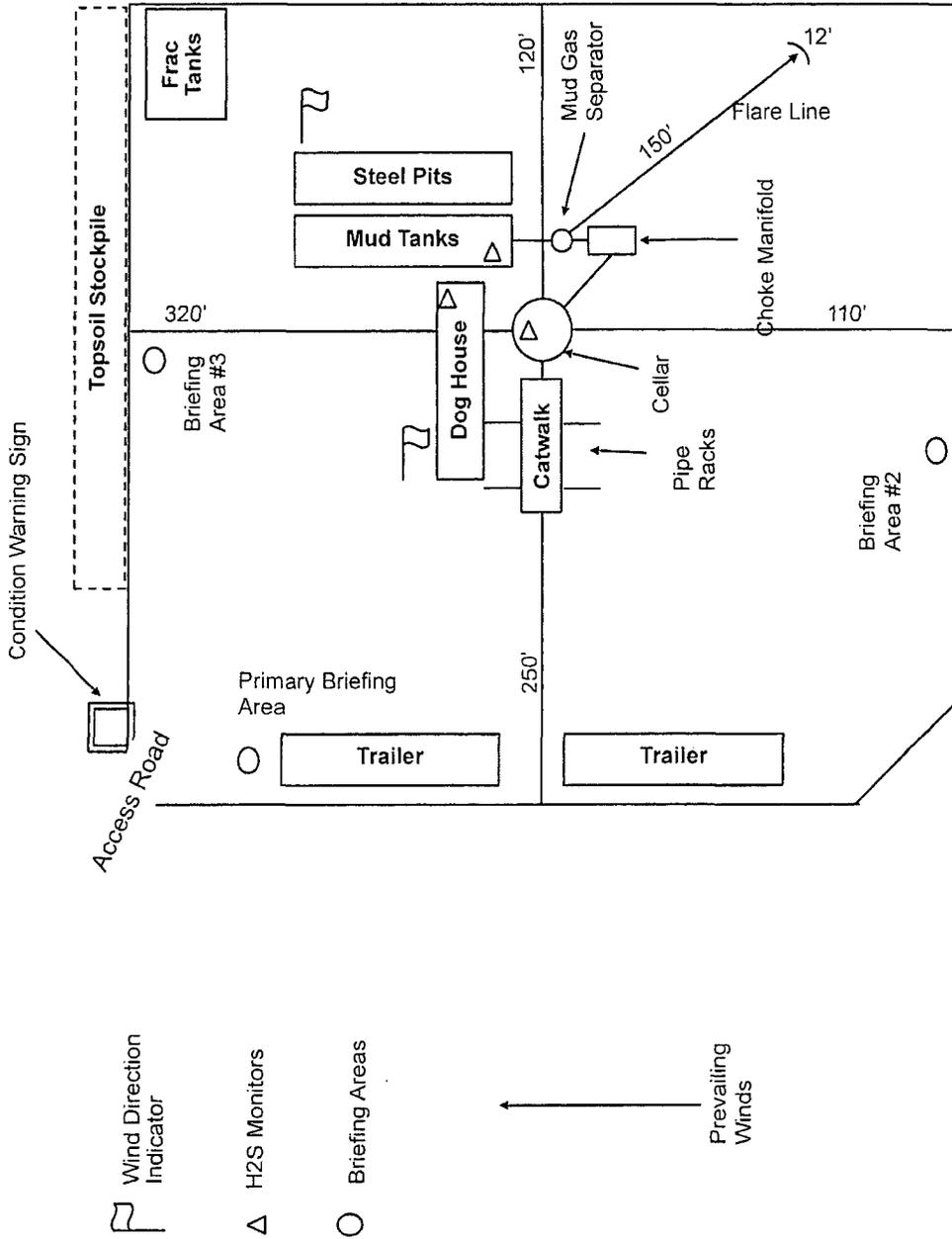
11 Emergency Contacts

- See APD

H2S Contingency Plan Emergency Contacts  
 Matador Production Company  
 Sec. 20, T20S, R29E, Eddy County, NM

<u>Company Office</u>			
Matador Production Company	(972)-371-5200		
<u>Key Personnel</u>			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Aaron Byrd	Drilling Engineer	972-371-5267	214-507-2333
	Construction Superintendent		
	Construction Superintendent		
<u>Artesia</u>			
Ambulance			911
State Police		575-746-2703	
City Police		575-746-2703	
Sheriff's Office		575-746-9888	
Fire Department		575-746-2701	
Local Emergency Planning Committee		575-746-2122	
New Mexico Oil Conservation Division		575-748-1283	
<u>Carlsbad</u>			
Ambulance			911
State Police		575-885-3137	
City Police		575-885-2111	
Sheriff's Office		575-887-7551	
Fire Department		575-887-3798	
Local Emergency Planning Committee		575-885-3581	
<u>Santa Fe</u>			
New Mexico Emergency Response Commission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Commission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
<u>National</u>			
Carlsbad BLM		575-234-5972	
National Emergency Response Center (Washington, D.C.)		800-424-8802	
<u>Medical</u>			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd S.E., D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop S.E.; Albuquerque, NM		505-842-4949	
<u>Other</u>			
Boots & Coots IWC		800-256-9688	or 281-931-8884
Cudd Pressure Control		432-699-0139	or 432-563-3356
Haliburton		575-746-2757	
B.J. Services		575-746-3569	

# H2S Rig Diagram



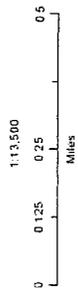
Stebbins 20 Fed 123H  
 SHL 1693' FSL & 130' FWL  
 BHL 1870' FSL & 240' FEL  
 20-20S-29E  
 Eddy County, NM



# Matador Production Company

Stebbins Fed 20 #123H  
H2S Contingency Plan:  
1 Mile Radius Map

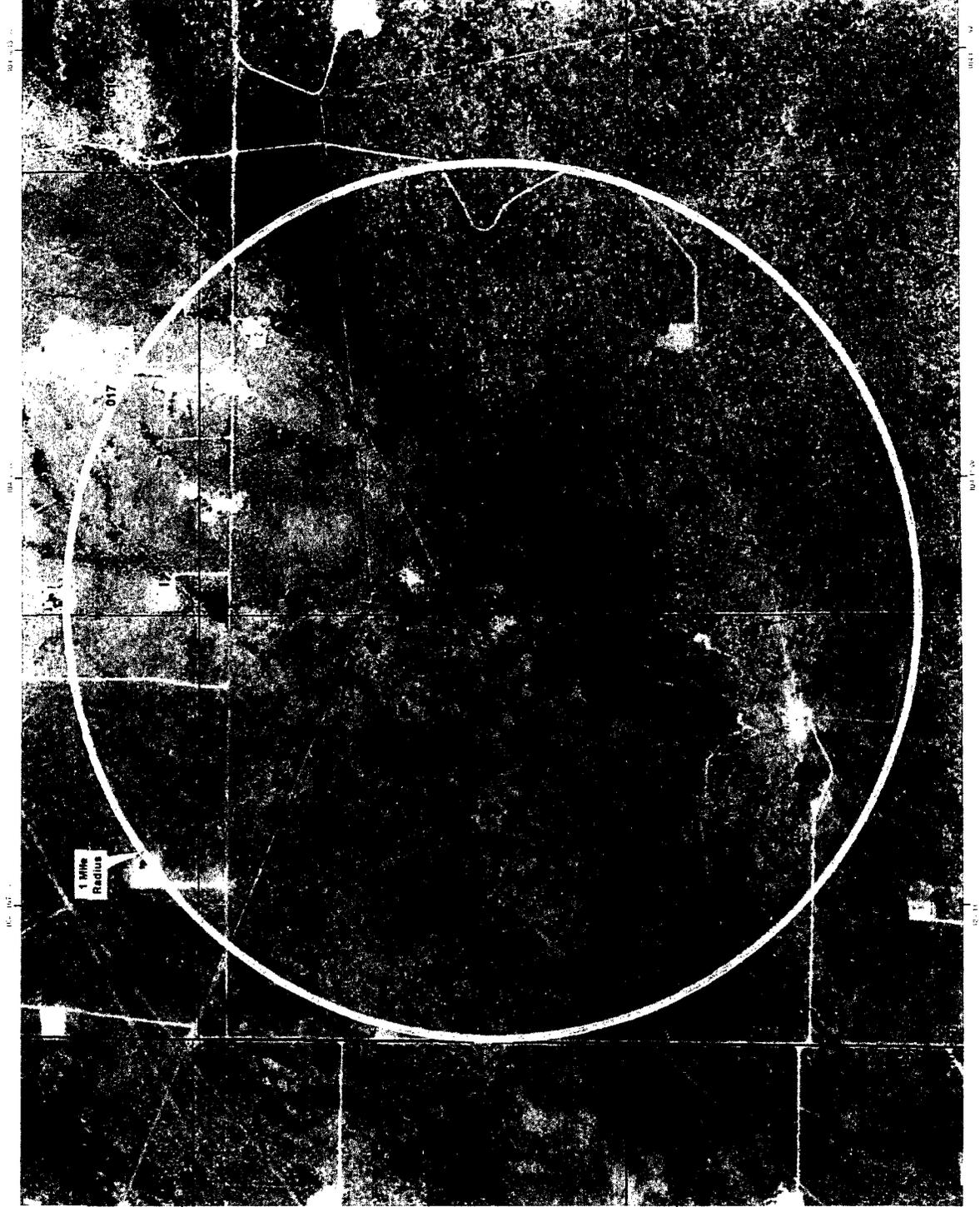
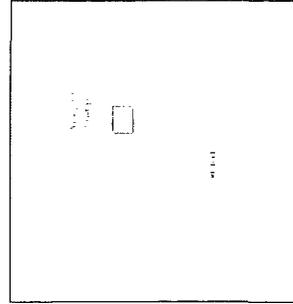
Section 20, Township 20S, Range 29E  
Eddy County, New Mexico



NAD 1927 New Mexico State Plane East  
FPS 3001 Feet

**PERRY UTY**

Prepared by Permats West, Inc. July 29, 2016  
for Matador Production Company

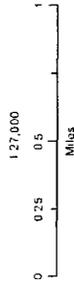


# Matador Production Company

Stebbins Fed 20 #123H  
 H/S Contingency Plan:  
 2 Mile Radius Map

Section 20, Township 20S, Range 29E  
 Eddy County, New Mexico

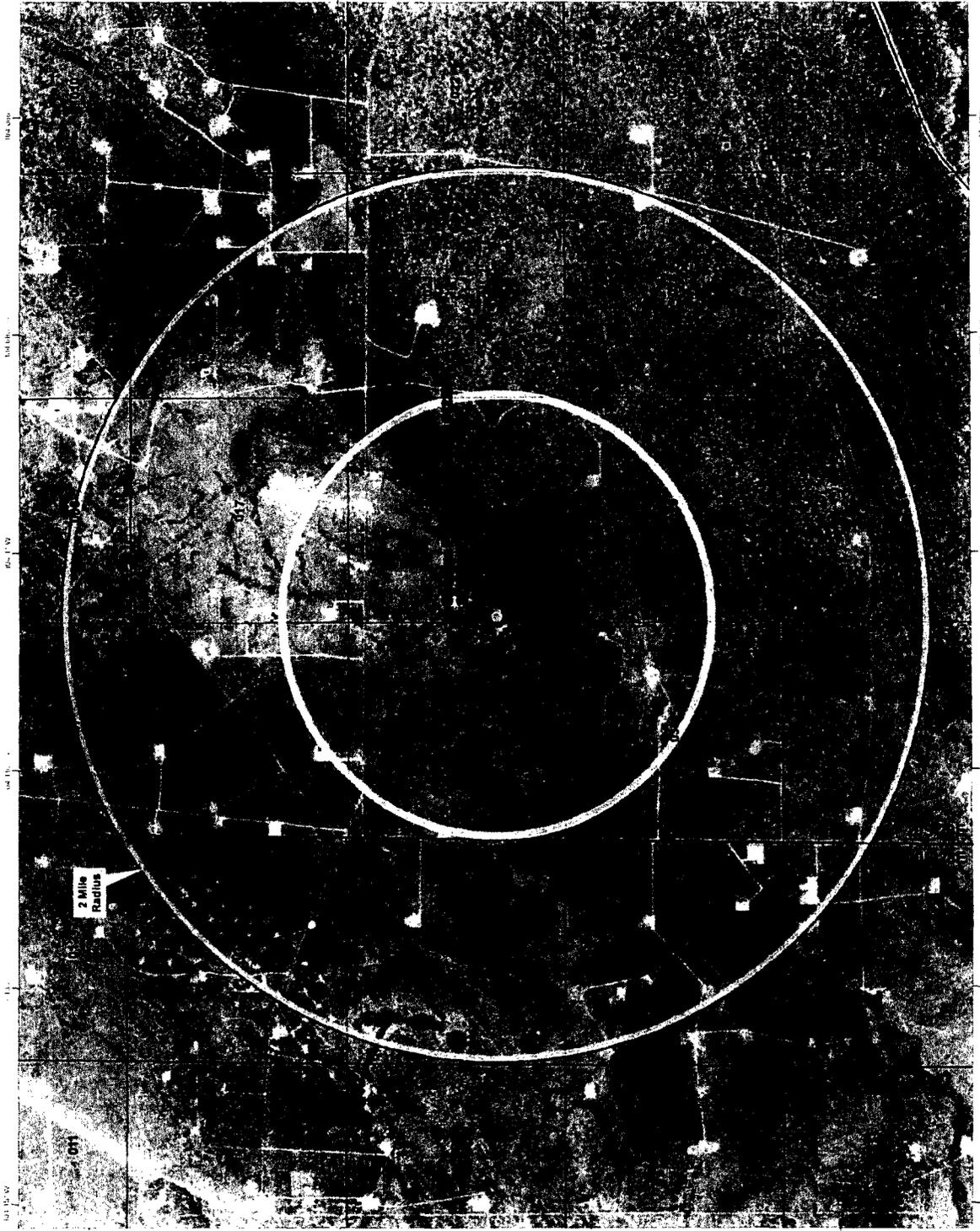
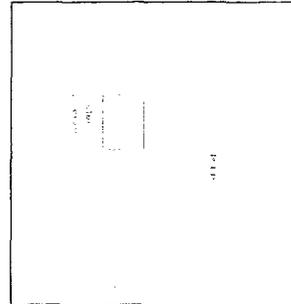
 Surface Hole Location



IMAD 1957 New Mexico State Plane East  
 FIPS 3001 Feet

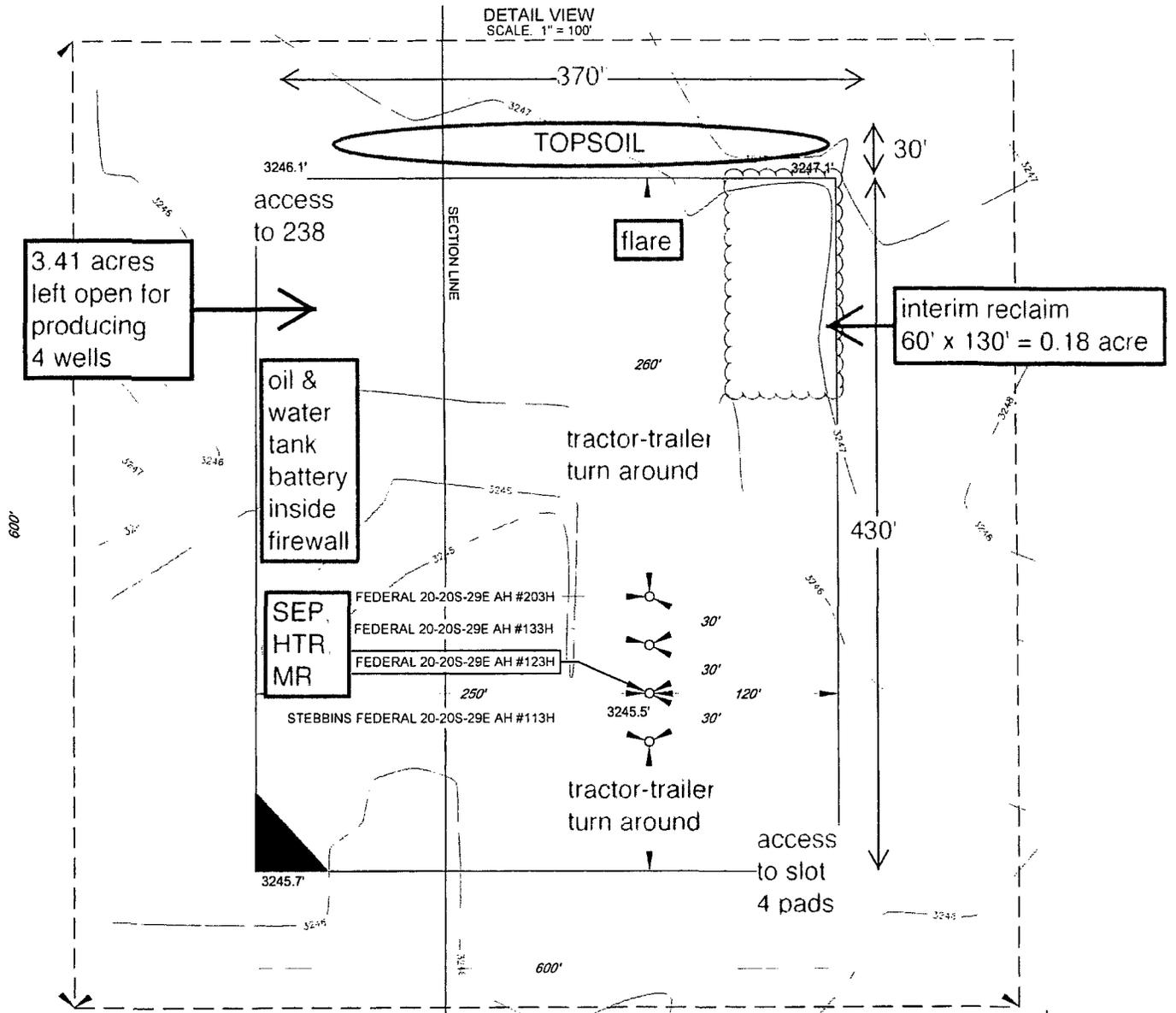
PERMITS ONLY

Prepared by Permits West, Inc., July 29, 2016  
 for Matador Production Company





SECTION 20, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.  
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: STEBBINS FEDERAL 20-20S-29E AH #123H

#123H LATITUDE N 32.5562535 #123H LONGITUDE W 104.1048559

LEGEND

SECTION LINE

PRODUCTION FACILITY & INTERIM RECLAMATION DIAGRAM

SCALE: 1" = 100'  
0' 50' 100'

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



WWW.TOPOGRAPHIC.COM

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

Matador Production Company  
Stebbins 20 Fed 123H

SURFACE PLAN PAGE 1

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.  
BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.  
Eddy County, NM

### Surface Use Plan

#### 1. ROAD DIRECTIONS & DESCRIPTIONS (See MAPS 1 - 4)

From the junction of US 285 and Us 62/180 in Carlsbad...

Go East 9.1 miles on paved US 62/180 to the equivalent of Mile Post 44.15

Then turn left and go North 5.8 miles on paved County Road 243

Then sharply turn right and go East 1 mile on paved County Road 238

Then turn right and go South 3020.95' cross-country to the proposed pad

Non-county roads will be maintained as needed to Gold Book standards. This includes pulling ditches, preserving the crown, and cleaning culverts. This will be done at least once a year, and more often as needed. Caliche will be hauled from Constructors, Inc. existing pit on private land in NWNE 34-21s-27e.

*This is also doubling as a plan of development for a BLM road right-of-way application in E2NE4 & NESE 19-20s-29e. Dimensions are 30' x 3020.95' (from County Road 238 (Burton Flat Road) to pad edge) = 2.08 acres.*

#### 2. ROAD TO BE BUILT OR UPGRADED (See MAPS 3 & 4)

A BLM approved archaeologist will fence a cultural resource site along the road and monitor initial construction. The 3020.95' of new road to the well will be crowned and ditched, have a 14' wide driving surface, and be surfaced with caliche. Maximum disturbed width = 30'. Maximum grade = 1%. Maximum cut or fill = 2'. An 18" x 50' culvert will be installed in the south borrow ditch of County Road 238. No upgrade, cattle guard, or vehicle turn out is needed.

Existing jeep trails will be blocked at 3 intersections:

north and south of 32.56315° & -104.10602°

west of 32.56075° & -104.10635°

Matador Production Company  
Stebbins 20 Fed 123H

SURFACE PLAN PAGE 2

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.  
BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.  
Eddy County, NM

3. EXISTING WELLS (See MAP 2)

Existing oil, gas, water, disposal, and P & A wells are within a mile. No injection well is within a mile.

4. PROPOSED PRODUCTION FACILITIES (See MAPS 3, 7, & 8)

A tank battery will be built on the west side of the pad. A  $\approx 6$ " O. D. steel gas line will be buried 3167.83' north parallel to the new road to NM Gas Company's 10" line (NMNM-112801). County road will be bored. Construction corridor will be 30' wide.

A 3381.39' long overhead raptor safe 3-phase power line will be built north parallel to the gas line to Southwest Public Service's line (NMNM-120415). Construction corridor will be 15' wide.

5. WATER SUPPLY (See MAPS 1 - 4)

Water will be trucked from existing water wells (C 0370 & C 03607) on private land in NENE 24-21s-27e.

6. CONSTRUCTION MATERIALS & METHODS (see MAP 5)

NM One Call (811) will be notified before construction starts. A BLM approved archaeologist will fence off the southwest corner (50' x 50' x 70') of the pad and monitor initial construction. A livestock water line will be re-routed.

Top  $\approx 6$ " of soil and brush will be stockpiled north of the pad. Pipe racks will be to the west. A closed loop drilling system will be used. Caliche will be hauled from an existing Constructors, Inc. pit on private land in NWNE 34-21s-27e.

Matador Production Company

SURFACE PLAN PAGE 3

Stebbins 20 Fed 123H

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

## 7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the Eddy County landfill. There will be no trash burning. Contents (drill cuttings, mud, salts, and other chemicals) of the mud tanks will be hauled to CRI's state approved (NM-01-0006) disposal site. Human waste will be disposed of in chemical toilets and hauled to the Carlsbad wastewater treatment plant.

## 8. ANCILLARY FACILITIES

There will be no airstrip or camp. Camper trailers will be on location for the company man, tool pusher, or mud logger.

## 9. WELL SITE LAYOUT

See Rig Diagram for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

## 10. RECLAMATION

Interim reclamation will consist of shrinking the pad  $\approx$ 5% by removing caliche and reclaiming the northeast corner (60' x 130'), leaving 3.41 acres around the production equipment. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas. Disturbed areas will be seeded in accordance with BLM's requirements. Enough stockpiled topsoil will be retained to cover the remainder of the pad when the wells are plugged. Once the last well is plugged, then the remainder of the pad and new road will be similarly reclaimed. Noxious weeds will be controlled.

Matador Production Company  
Stebbins 20 Fed 123H

SURFACE PLAN PAGE 4

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

11. SURFACE OWNER

All construction will be on BLM

12. OTHER INFORMATION

On site inspection was held with Vance Wolf and Stan Allison (both BLM) on June 16, 2016.

Lone Mountain submitted archaeology report NMCRIS 136767 and 136774 on October 21, 2016.

Matador Production Company  
Stebbins 20 Fed 123H

SURFACE PLAN PAGE 5

SHL 1693' FSL & 130' FWL Sec. 20, T. 20 S., R. 29 E.

BHL 1870' FSL & 240' FEL Sec. 20, T. 20 S., R. 29 E.

Eddy County, NM

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 29th day of October, 2016.



---

Brian Wood, Consultant

Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

Field representative will be:

Sam Pryor, Senior Staff Landman

Matador Production Company

5400 LBJ Freeway, Suite 1500

Dallas TX 75240

Phone: (972) 371-5241

FAX: (214) 866-4841

JAN 23 2017

RECEIVED

## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Harvey E Yates
LEASE NO.:	NM03677
WELL NAME & NO.:	123H-Stebbins 20 Federal
SURFACE HOLE FOOTAGE:	1693' FSL & 130' FWL
BOTTOM HOLE FOOTAGE:	2250' FSL & 330' FEL,
LOCATION:	Section 20, T. 20 S., R 29 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**
  - Berm Well Pad
  - Livestock Water Pipeline Reroute Requirements
  - Two-Track Road Reclamation Requirements
  - Cave/Karst
- Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- Road Section Diagram**
- Drilling**
  - High Cave/Karst
  - Capitan Reef
  - Casing/Cement Requirements
  - Logging Requirements
  - Waste Material and Fluids
- Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipeline
  - Electric Line
- 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. 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)

### **Berm Well Pad:**

The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

### **Livestock Water Pipeline Reroute Requirements**

The buried livestock water pipeline located underneath the proposed well pad must be rerouted around the east side of the well location as depicted in the survey plat in the APD. The operator/contractor must coordinate with the rancher (Winston Ballard) prior to pipeline reroute installation to work out details on installation procedures. The operator is responsible for the integrity of the rerouted pipeline for the life of the Stebbins 20 Fed #1H well.

### **Two-Track Road Reclamation Requirements**

The two track road identified in the “Location Verification Map” in the APD and “Figure 1” in this document must be reclaimed during the same time as the new road construction. Reclamation procedures shall include ripping or disking the two-track road to break up the soil. The edges of the road and roadbed need to be contoured to match the surrounding terrain. The two ends of the portion of two-track road to be reclaimed must be sufficiently barricaded to prevent vehicle traffic on the reclamation.

## **Cave and Karst**

\*\* Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Construction:**

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

#### **No Blasting:**

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

#### **Pad Berming:**

The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

#### **Tank Battery Liners and Berms:**

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

#### **Leak Detection System:**

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### **Automatic Shut-off Systems:**

Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

## **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

### **Rotary Drilling with Fresh Water:**

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

### **Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

## **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 (575) 234-5909 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 APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

### **C. CLOSED LOOP SYSTEM**

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**

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 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 needs.

## **F. EXCLOSURE FENCING (CELLARS & PITS)**

### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

## **G. 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 twenty-five (25) 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**

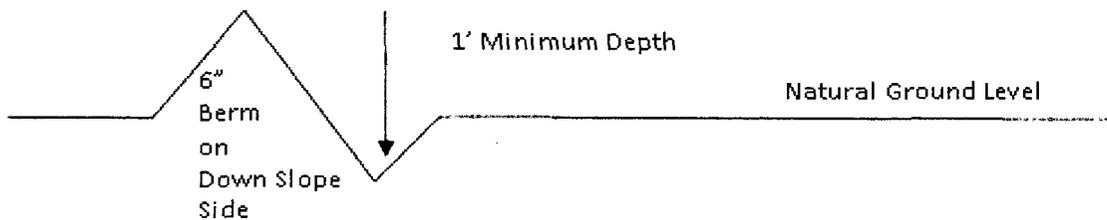
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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 a 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:

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

## Public Access

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

**Construction Steps**

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

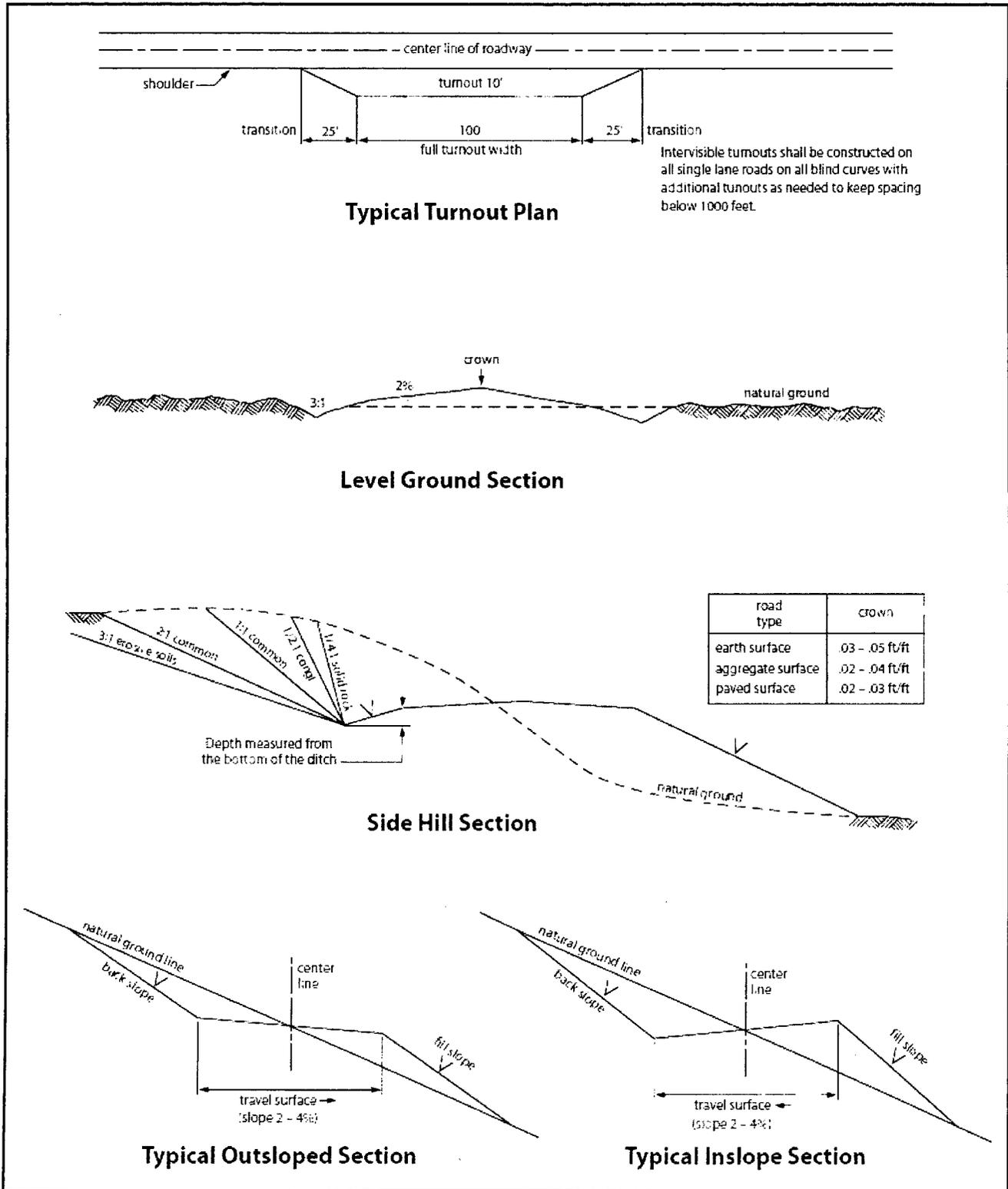


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## 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

**Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

1. **Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, provide measured values 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
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 is located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

### B. CASING

**Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).**

**The initial wellhead installed on the well will remain on the well with spools used as needed.**

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

**Wait on cement (WOC) time prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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.**

#### **High Cave/Karst**

**Possible water flows in the Queen, Salado and Artesia Group**

**Possibility lost circulation in the Capitan Reef, Cherry Canyon, Salado and Artesia Group.**

1. The **20** inch surface casing shall be set at approximately **400** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**
  - 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - c. 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.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **13-3/8** inch first intermediate casing, which shall be set at approximately **1200** feet (base of the Yates), is:

Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

3. The minimum required fill of cement behind the **9-5/8** inch second intermediate casing, which shall be set at **3100** feet in the base of the Capitan Reef, is:

Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

**Pilot hole is required to have a plug at the bottom of the hole. Plug is approved as written, however the plug shall be tag at least 50 feet above the Wolfcamp or approximately 9,117'. The BLM is to be contacted (575-361-2822) prior to tag of bottom plug.**

**Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.**

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Cement should tie-back **at least 50 feet above the top of the Capitan Reef** (TOC at approx. 1217 or approx.. 1883 feet into previous casing string). Operator shall provide method of verification. **Additional cement shall be required as excess calculates to 0%.**

5. 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.

**Note: A diverter requires a variance if it is only a diverter as shown on the submitted diagram with no request for a variance. If it is combined with an annular the variance is not required. – Operator can submit a sundry requesting a variance.**

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **surface casing** shoe shall be **2000 (2M)** psi.

**In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13-3/8** intermediate casing shoe shall be **2000 (2M)** psi.
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be **3000 (3M)** psi.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - d. The results of the test shall be reported to the appropriate BLM office.

- e. 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.**
- f. 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. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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

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

#### **E. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**EGF 110314**

## 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.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### **Chemical and Fuel Secondary Containment and Exclosure Screening**

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

### **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** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

## **B. BURIED PIPELINE STIPULATIONS**

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of

the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3          |
| <input type="checkbox"/> seed mixture 2            | <input type="checkbox"/> seed mixture 4          |
| <input type="checkbox"/> seed mixture 2/LPC        | <input type="checkbox"/> Apломado Falcon Mixture |

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, 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.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

#### STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

**A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

## **IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce

the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## **X. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1, for Loamy 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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>
Plains lovegrass ( <i>Eragrostis intermedia</i> )	0.5
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.0
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