Carlsbad Field Office
OCD Artesia

Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL: NMNM-121941

6. If Indian, Allotee or Tribe Name
N/A

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
will comm. w/ fee lease 317431

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Charlie Sweeney Fed Com #228H ~~316071~~

2. Name of Operator MATADOR PRODUCTION COMPANY (228937)

9. API Well No.
30-015- 44028

3a. Address 5400 LBJ FREEWAY, SUITE 1500
DALLAS, TX 75240

3b. Phone No. *(include area code)*
972-371-5241

10. Field and Pool, or Exploratory
WILDCAT; WOLFCAMP B (96794)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 188' FSL & 545' FEL
At proposed prod. zone 240' FNL & 330' FEL

11. Sec., T. R. M. or Blk. and Survey or Area
SESE 31-23S-28E NMPM

14. Distance in miles and direction from nearest town or post office*
2 AIR MILES SW OF LOVING, NM

12. County or Parish
EDDY

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
SHL:188'
BHL:240'

16. No. of acres in lease
BLM lease = 280 acres
comm. area = 320 acres

17. Spacing Unit dedicated to this well
E2 31-23S-28E

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
SHL: 30' (Sweeney 208)
BHL: 330' (ditto)

19. Proposed Depth
TVD:10300' MD:15056'

20. BLM/BIA Bond No. on file
BLM NMB-001079

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3100' UNGRADED

22. Approximate date work will start*
03/01/2017

23. Estimated duration
3 MONTHS

24. Attachments

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

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

25. Signature
Name *(Printed/Typed)* SAM PRYOR (PHONE: 972-371-5241)
Date 09/02/2016

Title
SENIOR STAFF LANDMAN (FAX: 972-371-5201)

Approved by *(Signature)*
Name *(Printed/Typed)* Cody R. Layton
Date 12/23/16

Title FOR FIELD MANAGER
Office CARLSBAD FIELD OFFICE

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

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

(Continued on page 2)

APPROVAL FOR TWO YEARS

*(Instructions on page 2)

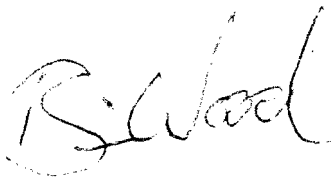
SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 03 2017
RECEIVED

RWP +RG 1-10-17

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 5th day of July, 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

July 5, 2016

To Who it May Concern:

Matador Resources Company has a private surface owner agreement with Vickie Connally (R211 Ash Road, Loving NM 88256) for the Charlie Sweeney Fed Com 31-23s-28e 228H well site, pipelines, power line, and road in NWSW, S2S2, NWSE, & SWNE Section 31, T. 23 S., R. 28 E. and pipelines in Lot 2 Section 6, T. 24 S., R. 28 E.; all Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Jacob & Merrellee Moore (1011 Bounds Road, Loving NM 88256) for their portion (NWNE 31-23s-28e) of the power line.

Matador Resources Company has a private surface owner agreement with Longwood Midstream Delaware LLC (5400 LBJ Freeway, Suite 1500, Dallas TX 75240) for their portion (Lot 2 31-23s-28e) of the water (Fast Line) pipeline.

Brian Wood

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

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-015- 44028		WILDCAT; WOLFCAMP B

[4]Property Code	[5]Property Name	[6]Well Number
~~316071~~ 317431	CHARLIE SWEENEY FED COM	#228H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	3100'

[10]Surface Location

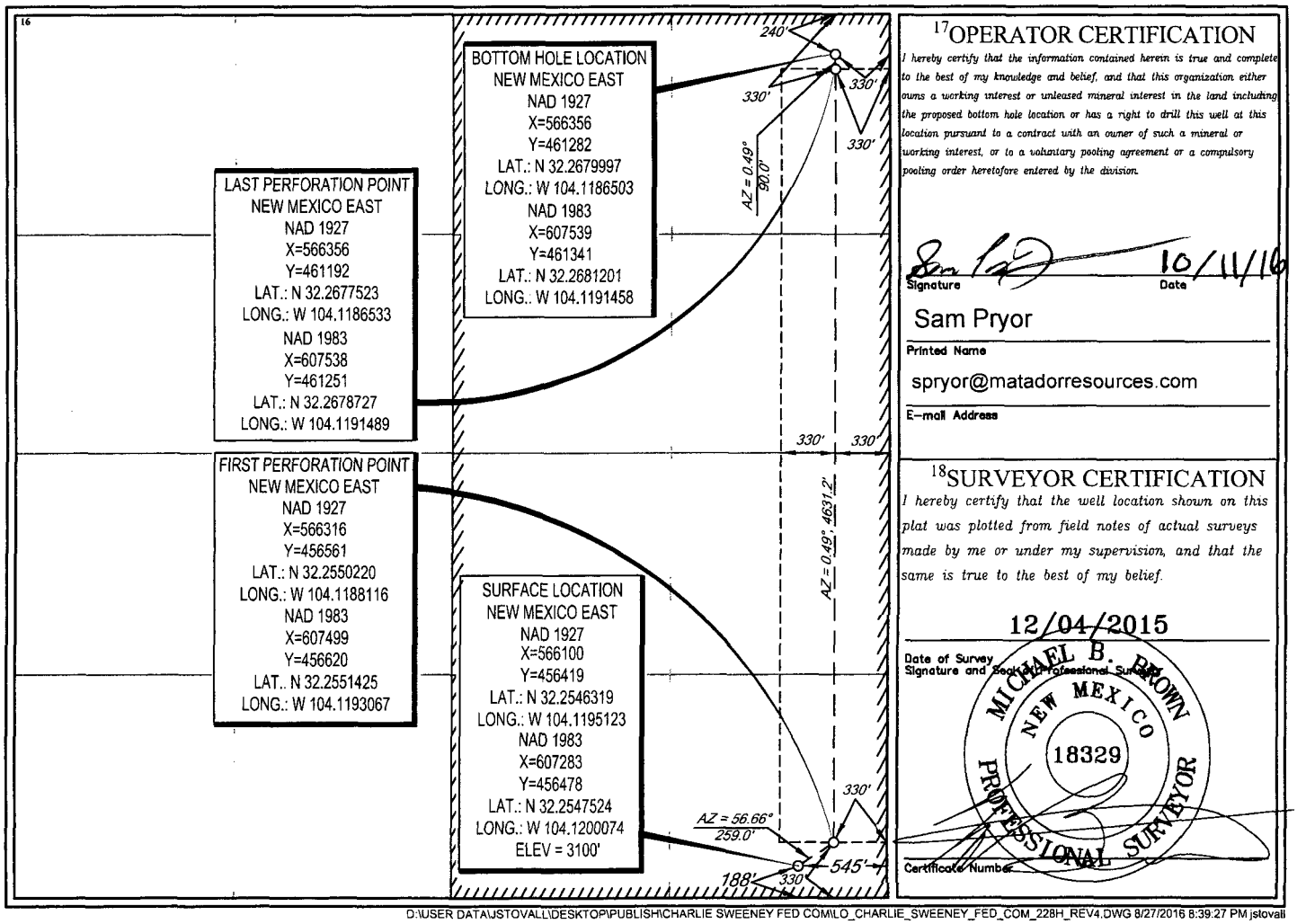
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	23–S	28–E	–	188'	SOUTH	545'	EAST	EDDY

[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	31	23–S	28–E	–	240'	NORTH	330'	EAST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
320		C	

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.



[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 10/11/16

Sam Pryor
Printed Name

spryor@matadorresources.com
E-mail Address

[18]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.

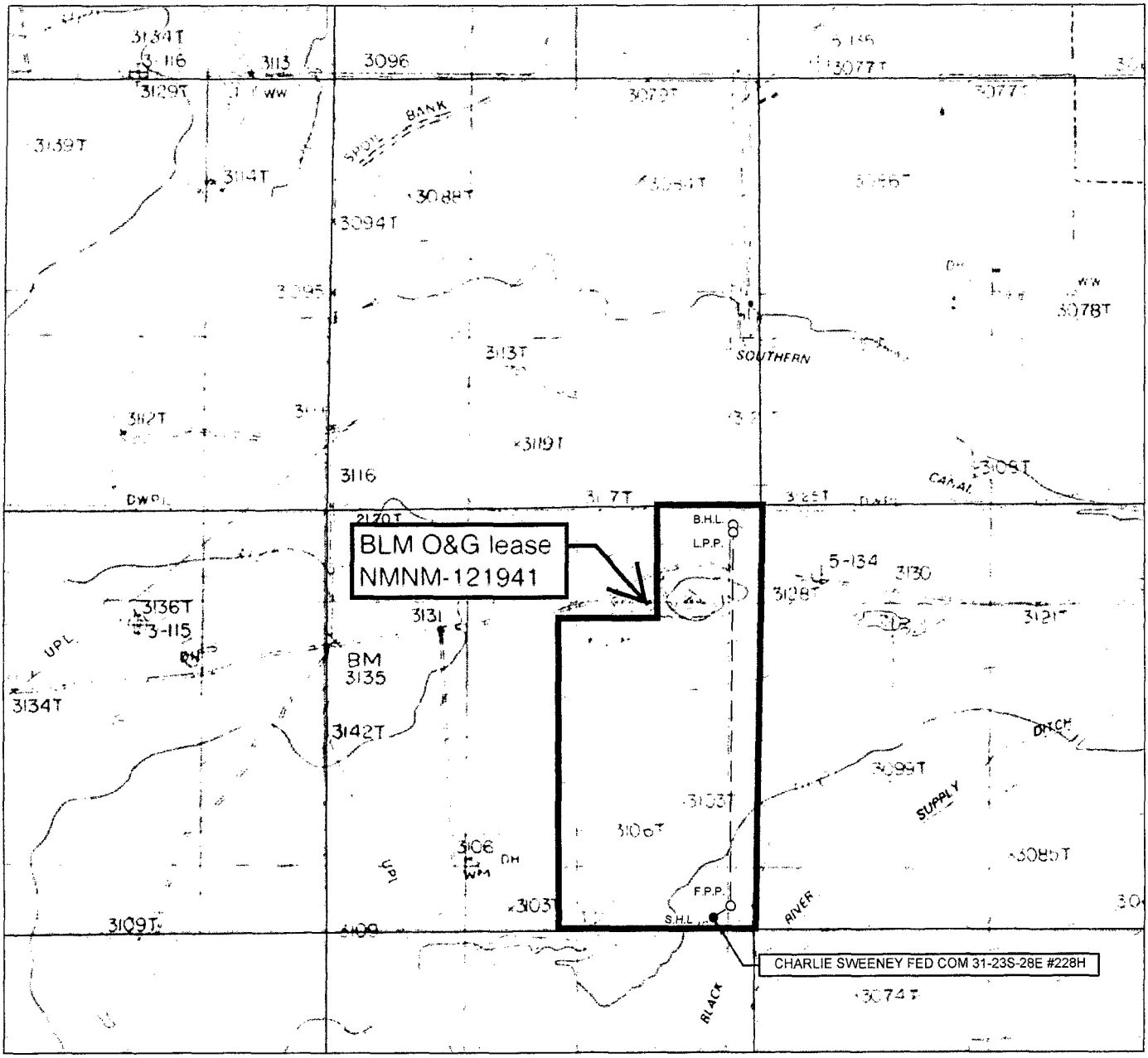
12/04/2015
Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Certificate Number

D:\USER DATA\JSTOVALL\DESKTOP\PUBLISH\CHARLIE SWEENEY FED COM\LO_CHARLIE_SWEENEY_FED_COM_228H_REV4.DWG 8/27/2016 8:39:27 PM jstovall

LOCATION & ELEVATION VERIFICATION MAP



Matador PRODUCTION COMPANY

LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #228H

SECTION 31 TWP 23-S RGE 28-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM ELEVATION 3100'
DESCRIPTION 188' FSL & 545' FEL

LATITUDE N 32.2546319 LONGITUDE W 104.1195123

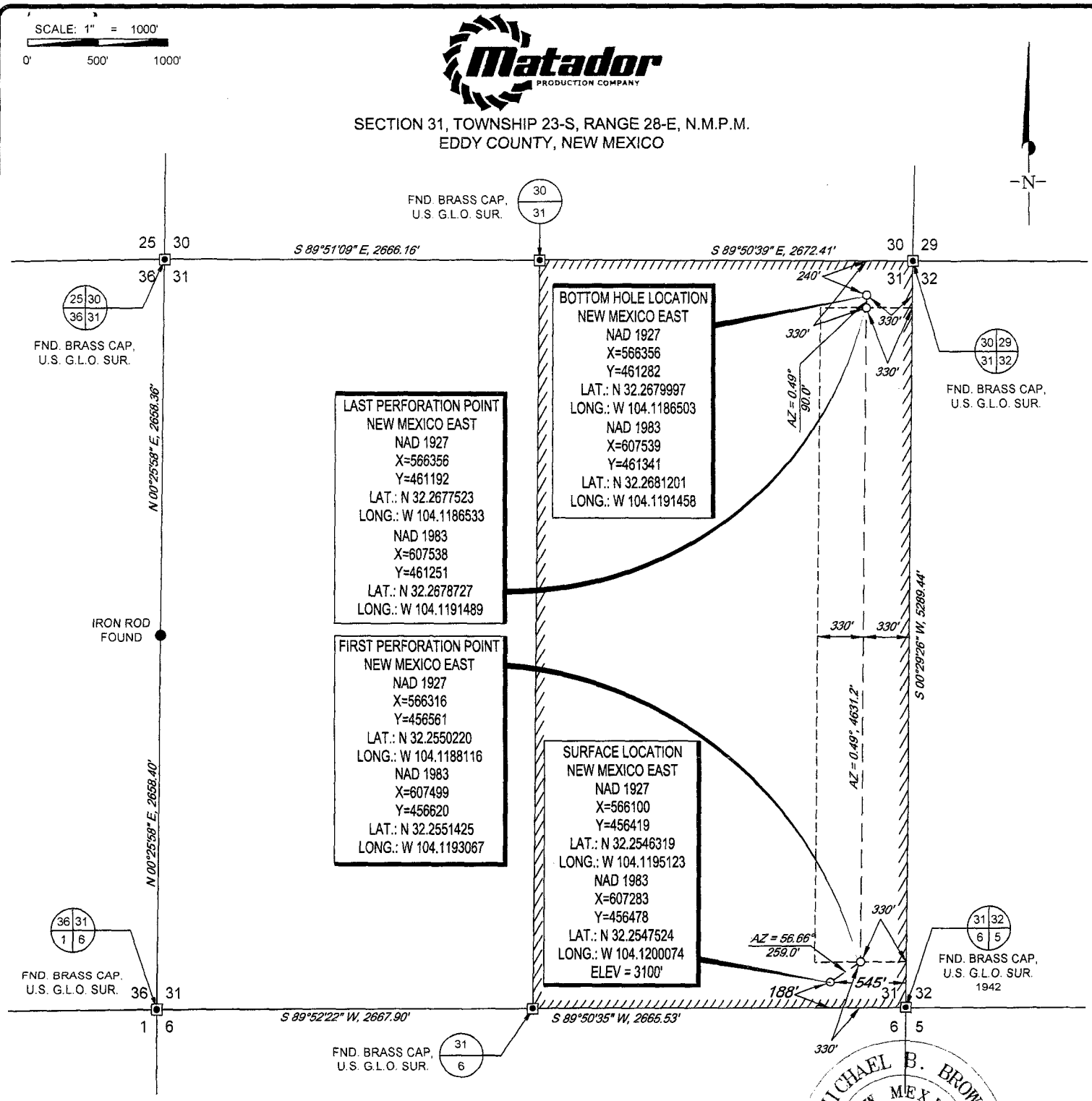
-N-

SCALE: 1" = 2000'
0' 1000' 2000'

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.

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



LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #228H

SECTION 31 TWP 23-S RGE 28-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

DESCRIPTION 188' FSL & 545' FEL

DISTANCE & DIRECTION

FROM INT. OF US-285 & W CEDAR ST., GO SOUTH ON US-285. ±1.0 MILE, THENCE WEST (RIGHT) ON HIGBY HOLE RD. ±0.4 MILES, THENCE WEST (RIGHT) ON BOUNDS RD. ±1.8 MILES, THENCE SOUTH (LEFT) ON PROPOSED RD. ±1.2 MILES TO A POINT ±250 FEET NORTHWEST OF THE LOCATION.

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

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Michael Blake Brown, P.S. No. 18329

DECEMBER 7, 2015

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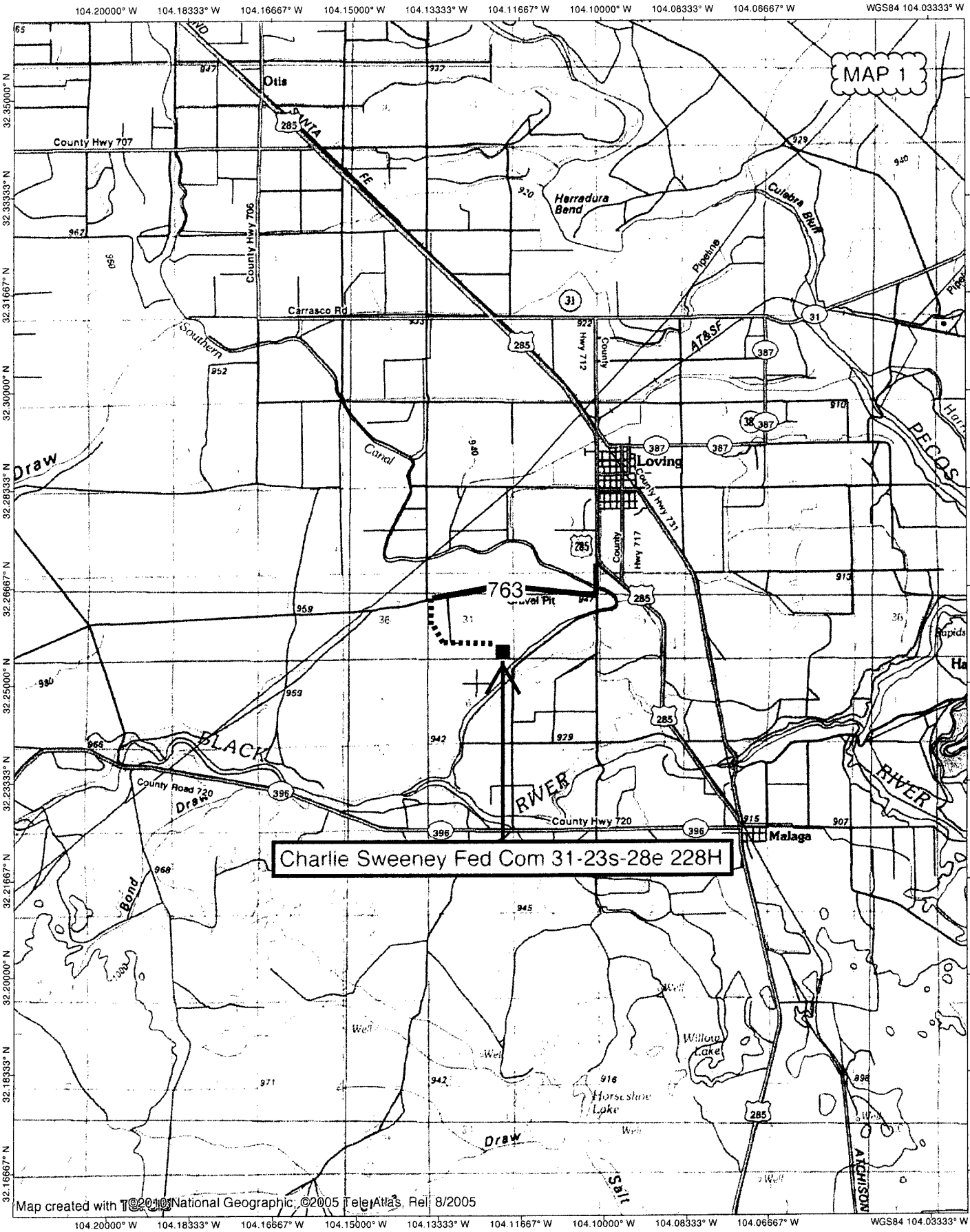
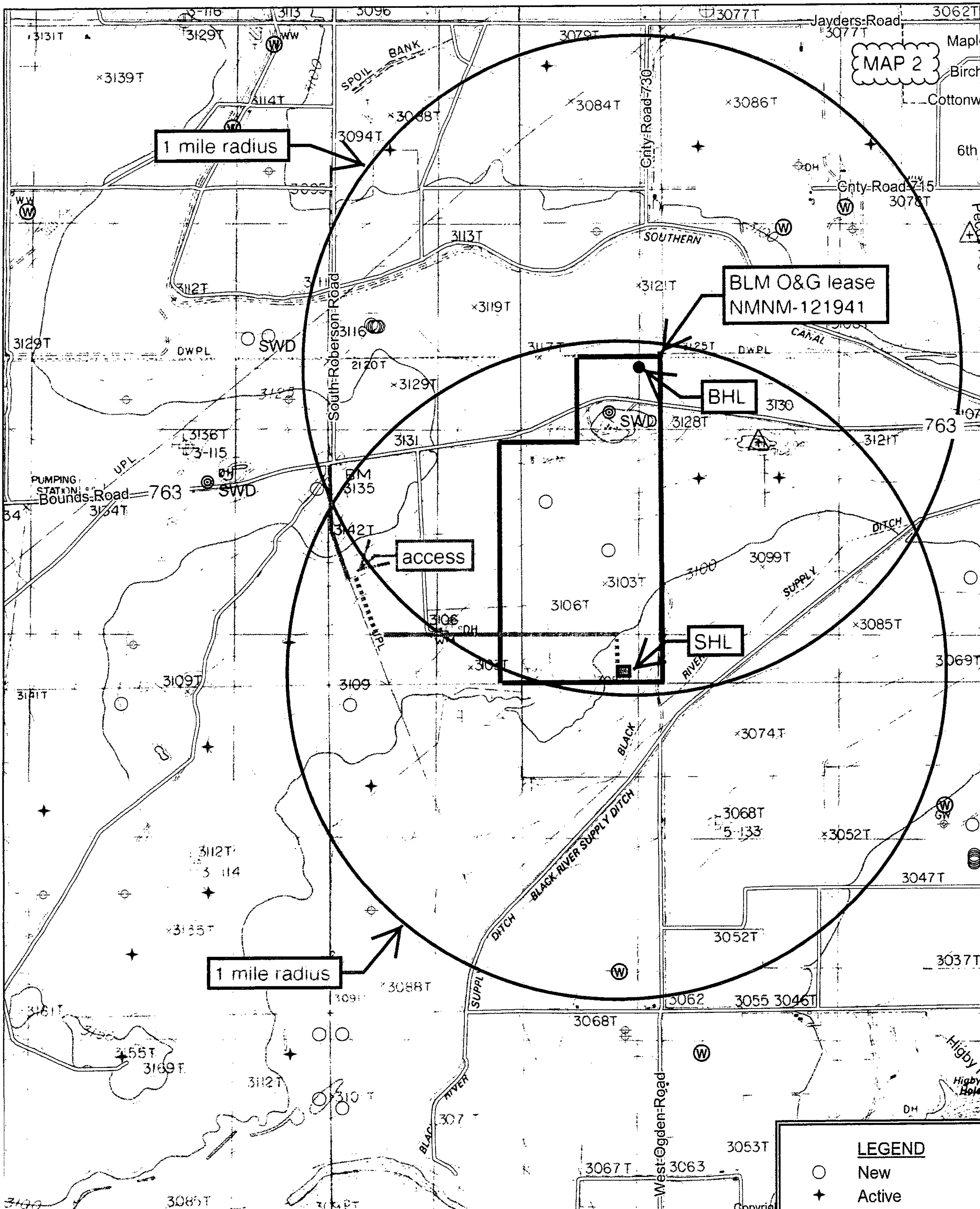

TOPO! map printed on 05/26/16 from "Untitled.tpo"
104.20000° W
104.18333° W
104.16667° W
104.15000° W
104.13333° W
104.11667° W
104.10000° W
104.08333° W
104.06667° W
WGS84 104.03333° W
32.35000° N
32.33333° N
32.31667° N
32.30000° N
32.28333° N
32.26667° N
32.25000° N
32.23333° N
32.21667° N
32.20000° N
32.18333° N
32.16667° N
MAP 1
Otis
County Hwy 707
County Hwy 706
Herradura Bend
Culebra Bluff
Pipeline
Carrasco Rd
Southern
Draw
Canal
Loving
County Hwy 712
County Hwy 731
County Hwy 717
ATSF
PECOS
763
Gravel Pit
BLACK
RIVER
County Road 720
County Hwy 720
Malaga
Bond
Willow Lake
Horseshoe Lake
Well
Salt
ATCHISON
Charlie Sweeney Fed Com 31-23s-28e 228H
Map created with TOPO! ©2010 National Geographic, ©2005 Tele Atlas, Rel. 8/2005
NATIONAL GEOGRAPHIC
0.0 0.5 1.0 1.5 2.0 2.5 3.0 miles
0 1 2 3 4 5 km
TN MN
7.5°
05/26/16

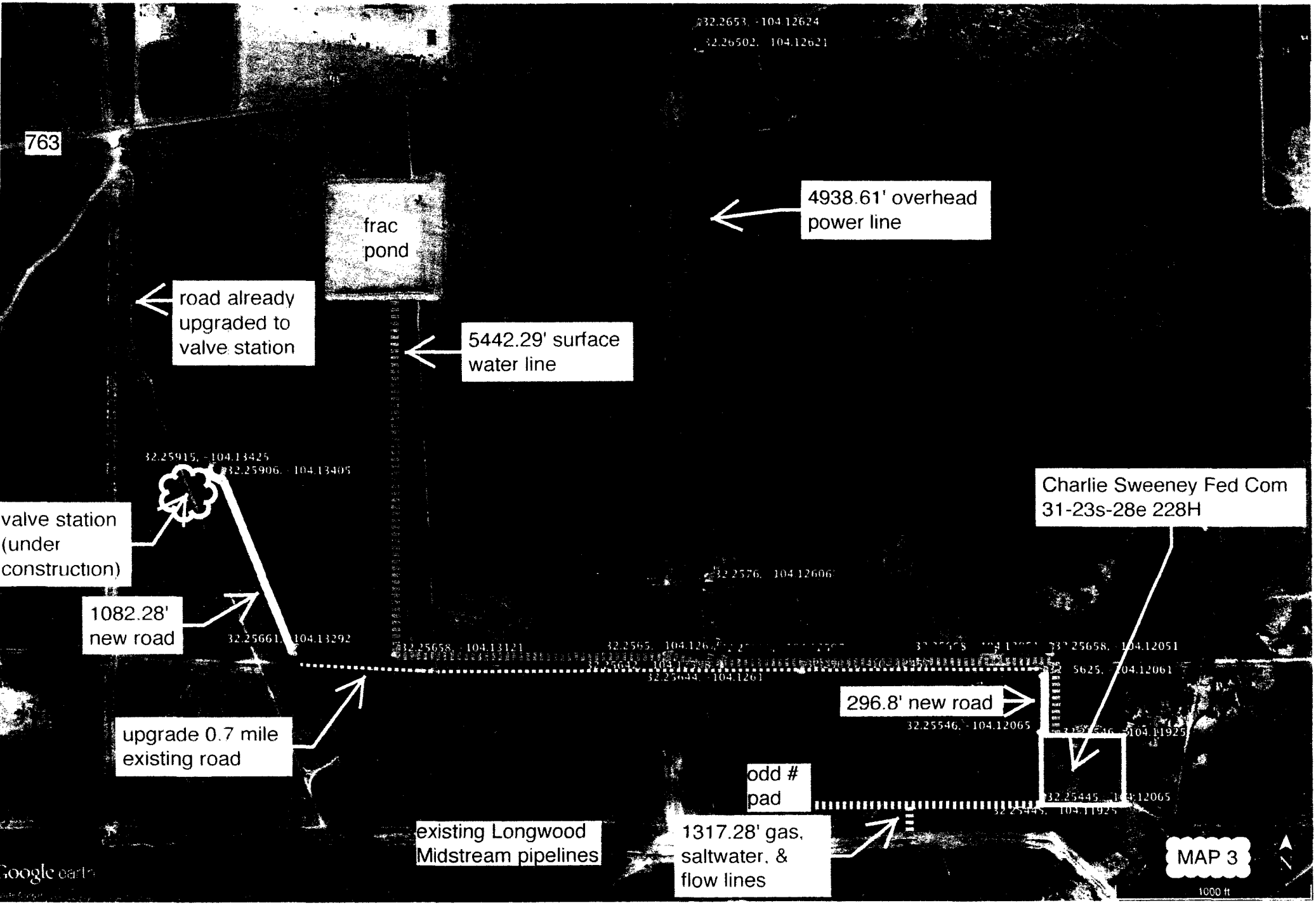


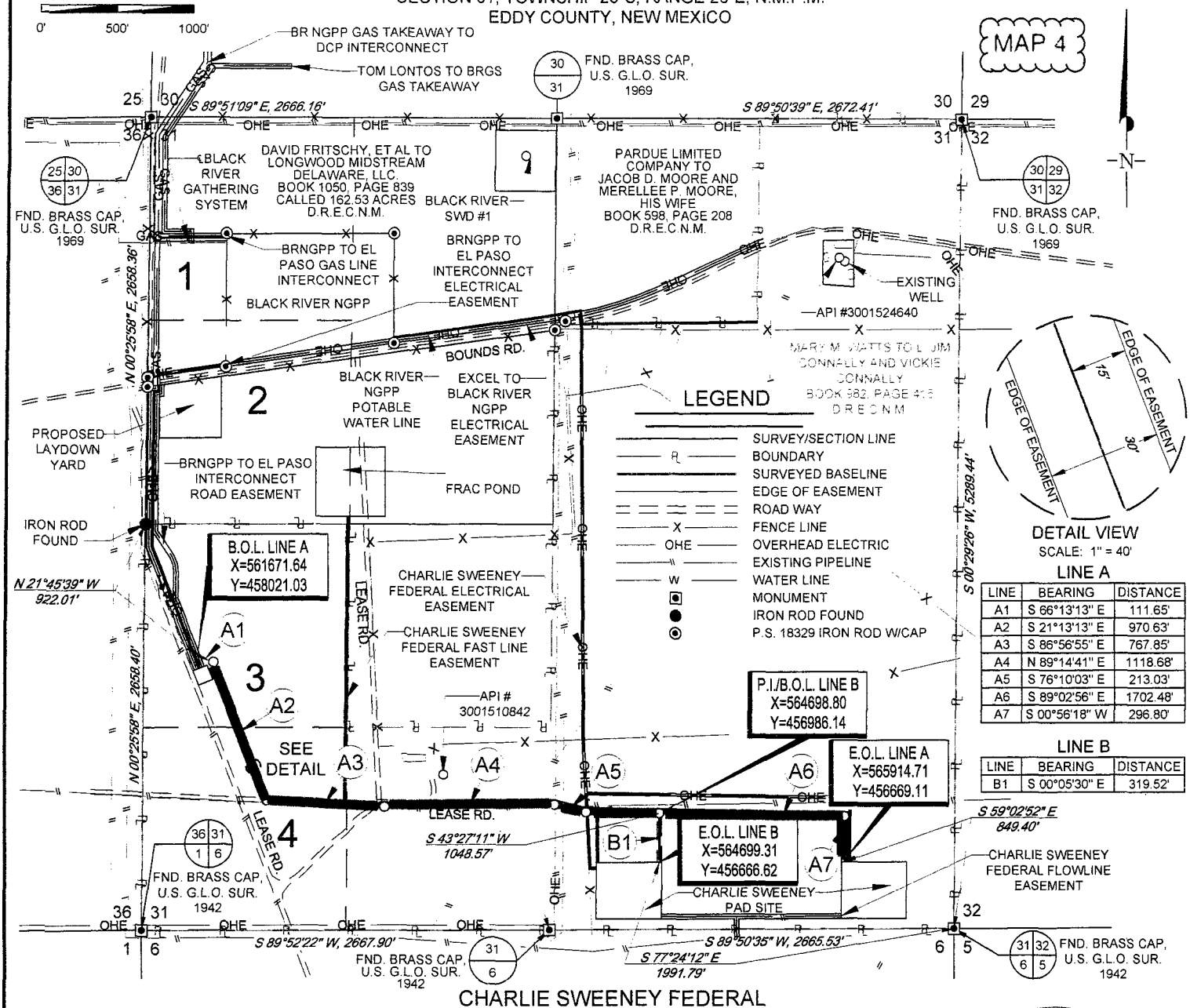
N

Quad: OTIS
Scale: 1 inch = 2,000 ft.

LEGEND

- ○ New
- ✦ Active
- P&A
- INJ
- SWD
- Ⓦ Water


763
frac pond
4938.61' overhead power line
road already upgraded to valve station
5442.29' surface water line
32.25915, -104.13425
32.25906, -104.13405
valve station (under construction)
1082.28' new road
32.25661, -104.13292
upgrade 0.7 mile existing road
Charlie Sweeney Fed Com 31-23s-28e 228H
296.8' new road
32.25546, -104.12065
odd # pad
existing Longwood Midstream pipelines
1317.28' gas, saltwater, & flow lines
MAP 3
1000 ft
Google earth



LINE A

LINE	BEARING	DISTANCE
A1	S 66°13'13" E	111.65'
A2	S 21°13'13" E	970.63'
A3	S 86°56'55" E	767.85'
A4	N 89°14'41" E	1118.68'
A5	S 76°10'03" E	213.03'
A6	S 89°02'56" E	1702.48'
A7	S 00°56'18" W	296.80'

LINE B

LINE	BEARING	DISTANCE
B1	S 00°05'30" E	319.52'

CHARLIE SWEENEY FEDERAL 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 5500.64 feet or 333.37 rods, containing 3.79 acres more or less.

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

Matador PRODUCTION COMPANY

TOPOGRAPHIC LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
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WWW.TOPOGRAPHIC.COM

Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

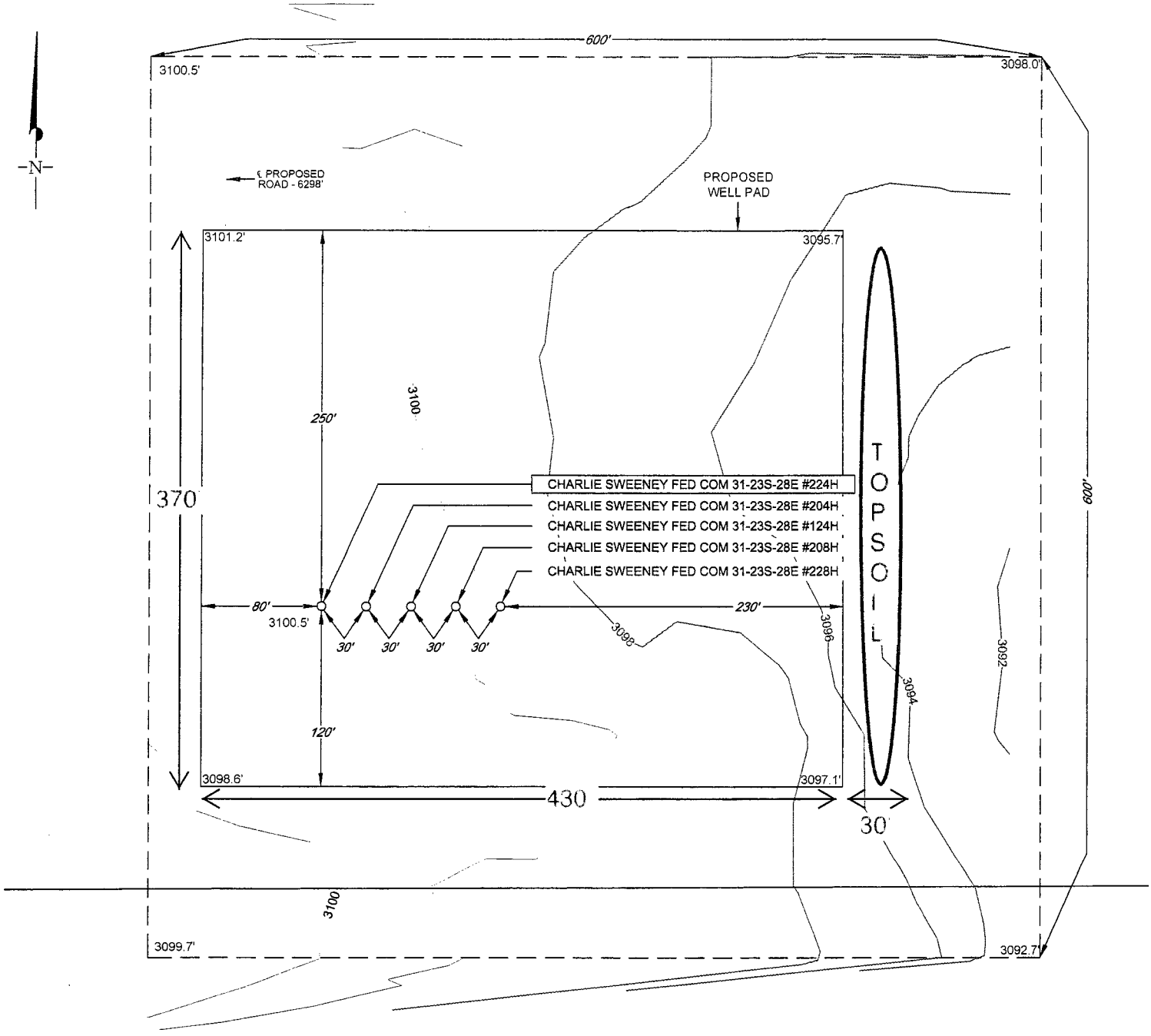
CHARLIE SWEENEY FEDERAL ROAD EASEMENT	REVISION:	
DATE: 06/20/16		
FILE: EP_CHARLIE_SWEENEY_FEDERAL_ROAD_EASEMENT		
DRAWN BY: MML		
SHEET: 1 OF 1		

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 CO. 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
6. P.I. = POINT OF INTERSECTION
7. D.R.E.C.N.M. = DEED RECORDS EDDY COUNTY NEW MEXICO

Matador PRODUCTION COMPANY

MAP 5

SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEGEND

SECTION LINE
ARCH SITE
PROPOSED ROAD

LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #224H

#224H LATITUDE N 32.2546326 #224H LONGITUDE W 104.1199004

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.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

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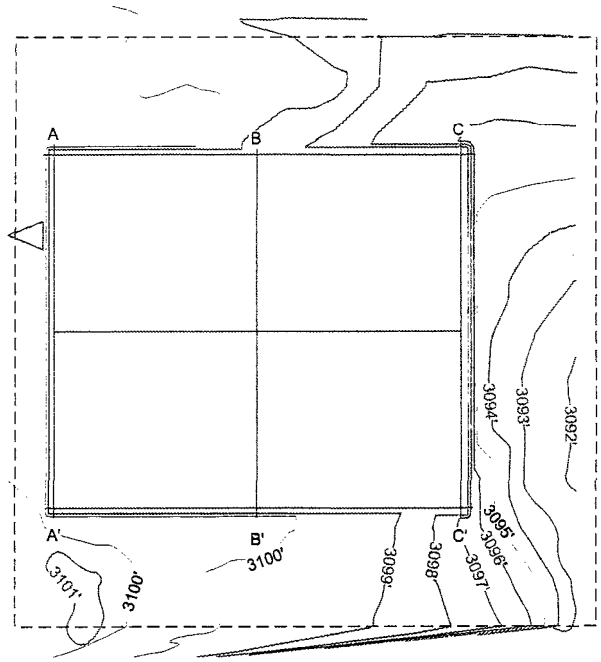
EXHIBIT "A"

SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SCALE: 1" = 200'
0' 100' 200'

MAP 6

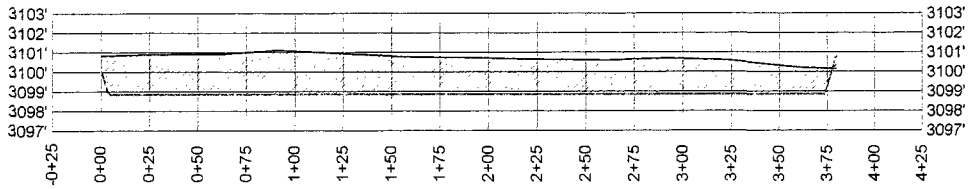
N



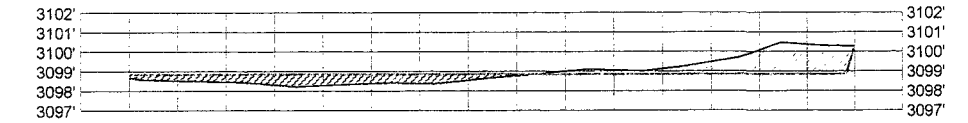
Top of pad elevation: 3098.8544
Cut Slope: 33.33% 3.00:1 18.43°
Fill Slope: 33.33% 3.00:1 18.43°
Balance Tolerance (C.Y.): 0.00
Cut Swell Factor: 1.00
Fill Shrink Factor: 1.00

Pad Earthwork Volumes
Cut 139,546.2 C.F., 5,168.38 C.Y.
Fill: 139,546.2 C.F., 5,168.38 C.Y.
Balance Export: 0.0 C.F., 0.00 C.Y.
Area: 169247.4 Sq.Ft., 3.885 Acres

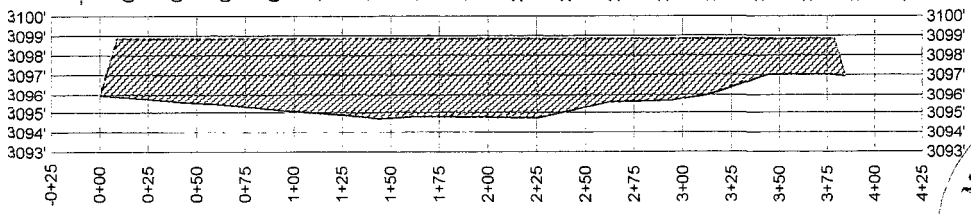
A-A'



B-B'



C-C'



Horizontal Scale = 1:50
Vertical Scale = 1:5

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Matador PRODUCTION COMPANY

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

Michael Blake Brown, P.S. No. 18329
JANUARY 27, 2016
Field note description of even date accompanies this plat.

CHARLIE SWEENEY FED COM 31-23S-28E #224H SURFACE PAD SITE PRO	REVISION:	
	INT	DATE
DATE: 01/27/16		
FILE: [illegible]		
DRAWN BY: GLH		
SHEET : 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
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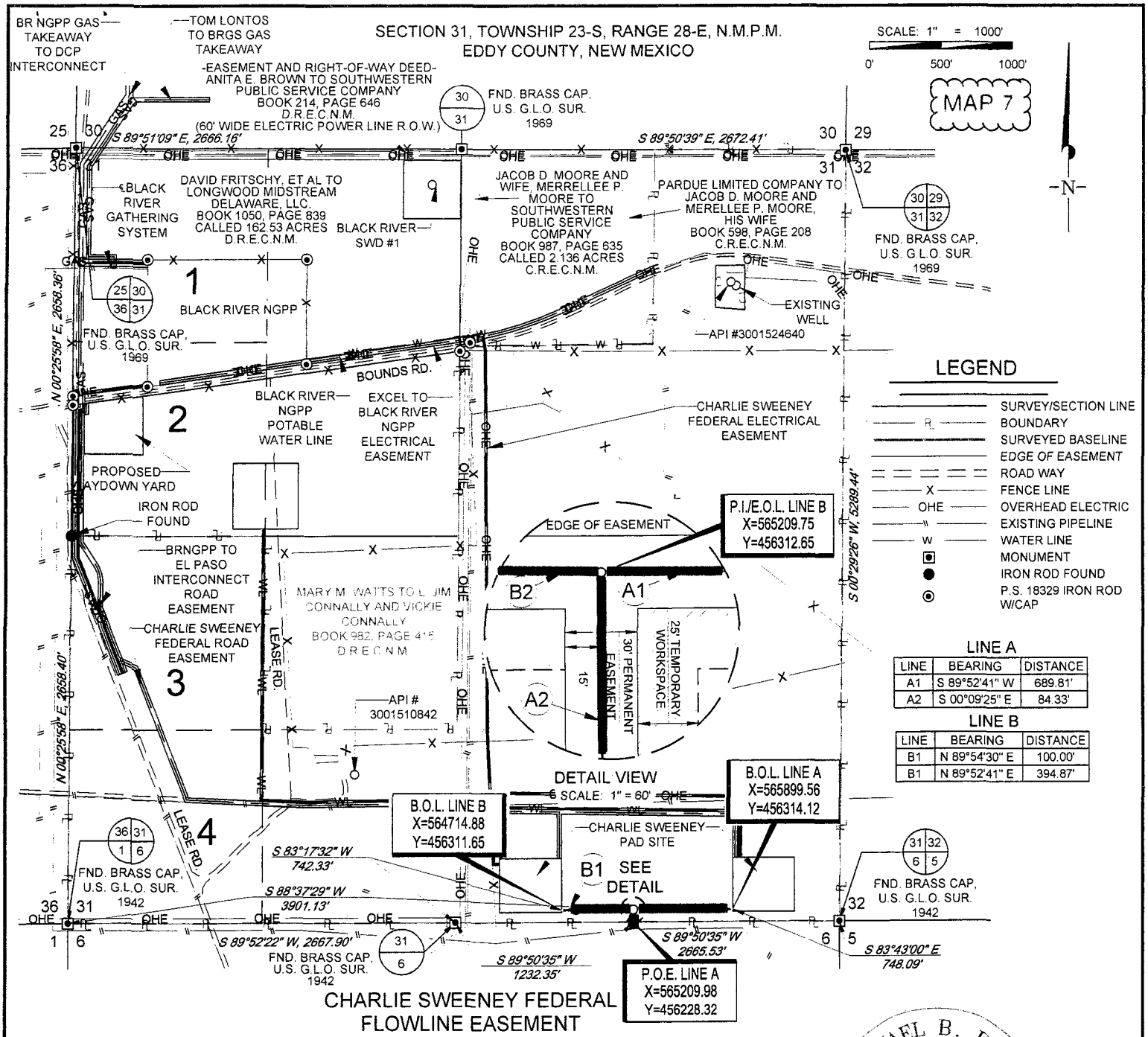

LINE A

LINE	BEARING	DISTANCE
A1	S 89°52'41" W	689.81'
A2	S 00°09'25" E	84.33'

LINE B

LINE	BEARING	DISTANCE
B1	N 89°54'30" E	100.00'
B1	N 89°52'41" E	394.87'

CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT

Being a proposed flowline easement being 30 feet in width, 15 feet left, and 15 feet right of the above platted centerline total line footage containing 1269.01 feet or 76.91 rods, containing 0.87 acres more or less.

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

Matador PRODUCTION COMPANY

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LOYALTY INNOVATION LEGACY
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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT	REVISION:	
	GJU	06/20/16
DATE: 12/15/15		
FILE: EP_CHARLIE_SWEENEY_FEDERAL_FLOWLINE_EASEMENT_SEC_31_REV1		
DRAWN BY: GLH		
SHEET: 1 OF 1		

NOTES:
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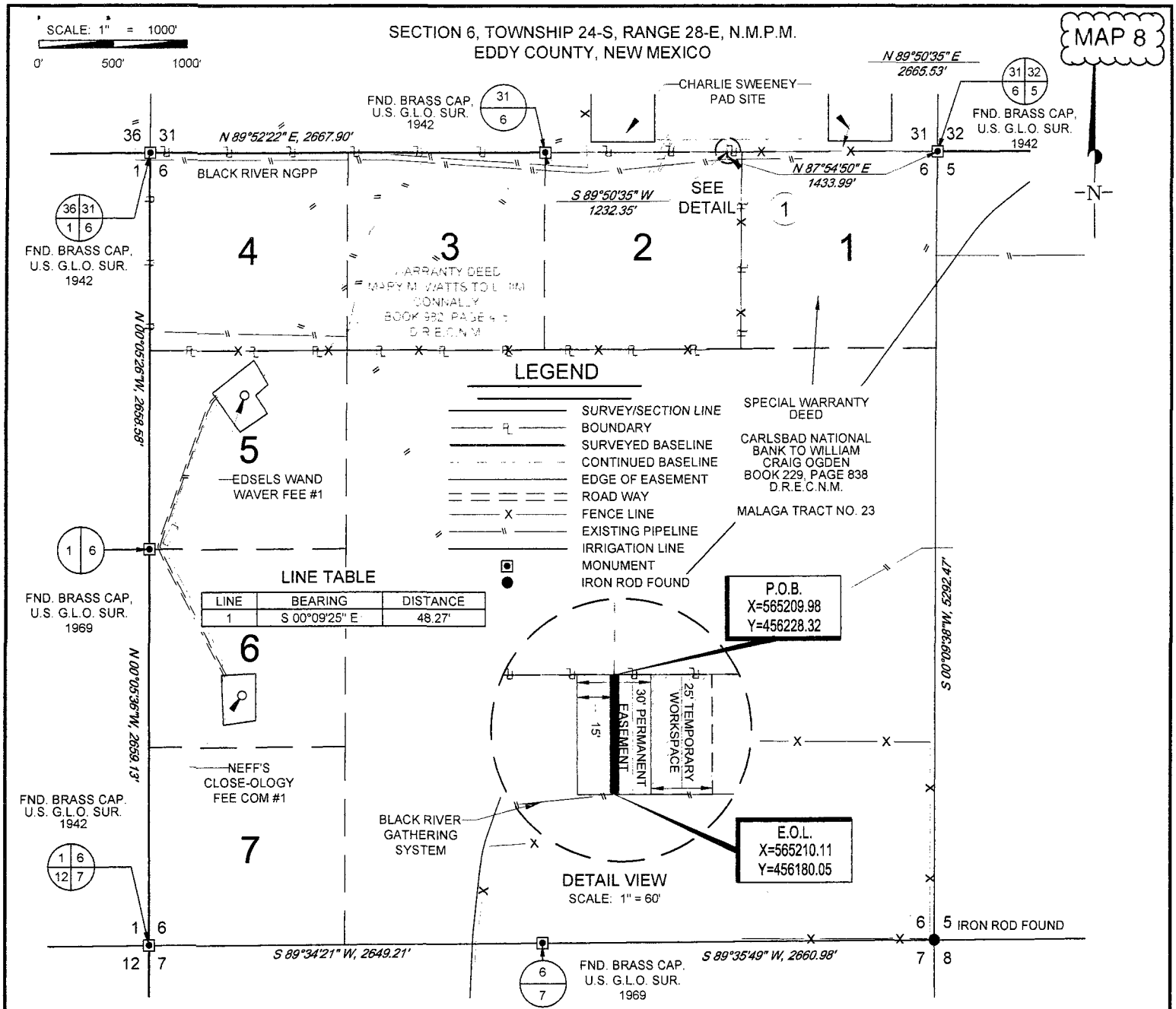
7. C.R.E.C.N.M. = COUNTY RECORDS EDDY COUNTY NEW MEXICO

S:\SURVEY\MATADOR_RESOURCES\CHARLIE_SWEENEY_FEDERAL_FLOWLINE_EASEMENT\FINAL_PRODUCTS\EP_CHARLIE_SWEENEY_FEDERAL_FLOWLINE_EASEMENT_SEC_31_REV1 DWG 6/22/2016 8.29.35 AM jstovall



CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT

Being a proposed flowline easement being 30 feet in width, 15 feet left, and 15 feet right of the above platted centerline total line footage containing 48.27 feet or 2.93 rods, containing 0.03 acres more or less.

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

Matador PRODUCTION COMPANY

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Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

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DATE: 06/20/16		
FILE: EP_CHARLIE_SWEENEY_FEDERAL_FLOWLINE_EASEMENT_SEC_6		
DRAWN BY: GJU		
SHEET: 1 OF 1		

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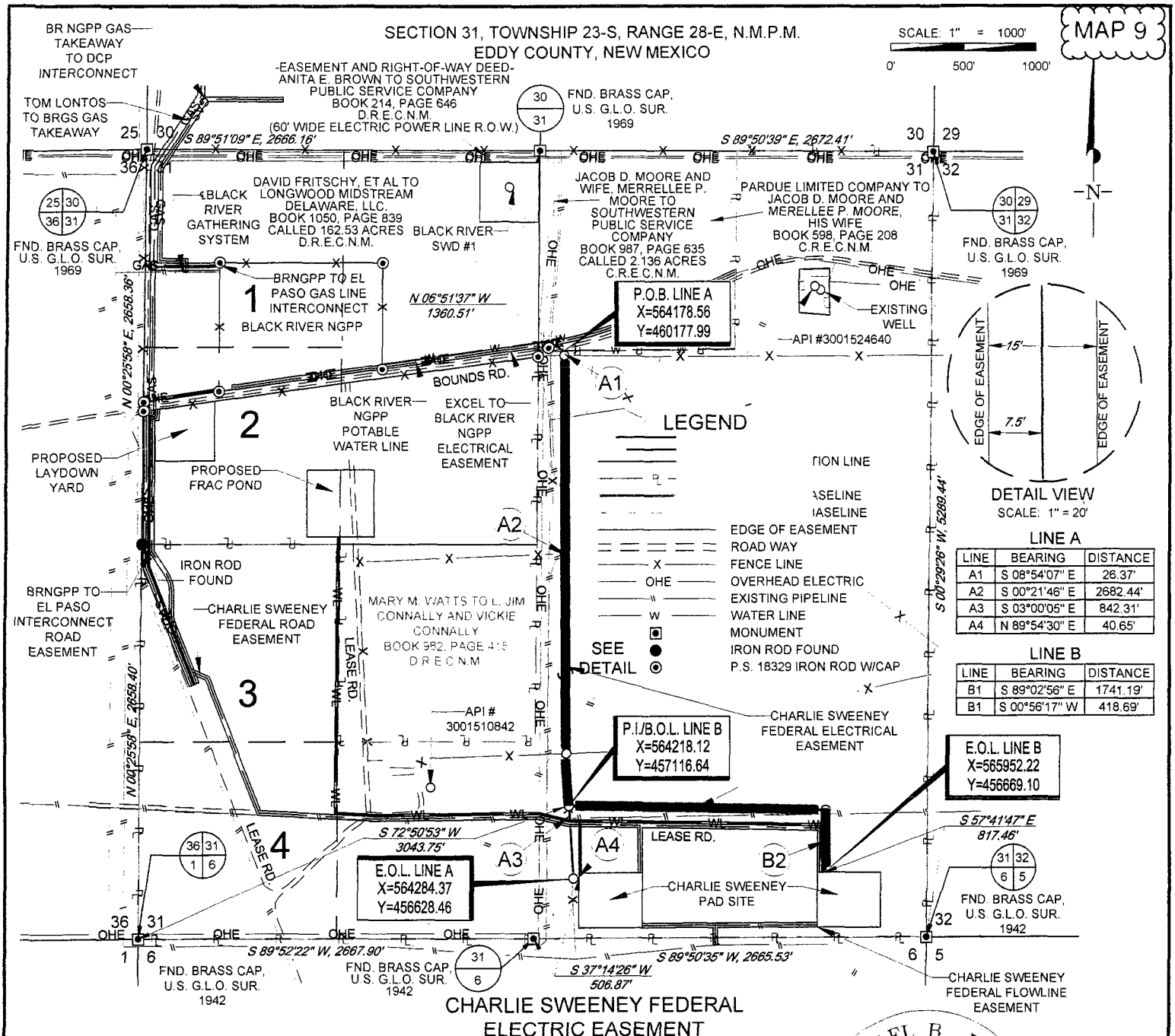

LINE A

LINE	BEARING	DISTANCE
A1	S 08°54'07" E	26.37'
A2	S 00°21'46" E	2682.44'
A3	S 03°00'05" E	842.31'
A4	N 89°54'30" E	40.65'

LINE B

LINE	BEARING	DISTANCE
B1	S 89°02'56" E	1741.19'
B1	S 00°56'17" W	418.69'

CHARLIE SWEENEY FEDERAL ELECTRIC EASEMENT

Being a proposed electric line easement being 15 feet in width, 7.5 feet left, and 7.5 feet right of the above platted centerline

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

Matador PRODUCTION COMPANY

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Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

CHARLIE SWEENEY FEDERAL ELECTRIC EASEMENT	REVISION:	
DATE: 06/20/16		
FILE: EP CHARLIE SWEENEY FEDERAL ELECTRICAL LINE EASEMENT CONNALLY		
DRAWN BY: GJU		
SHEET: 1 OF 1		

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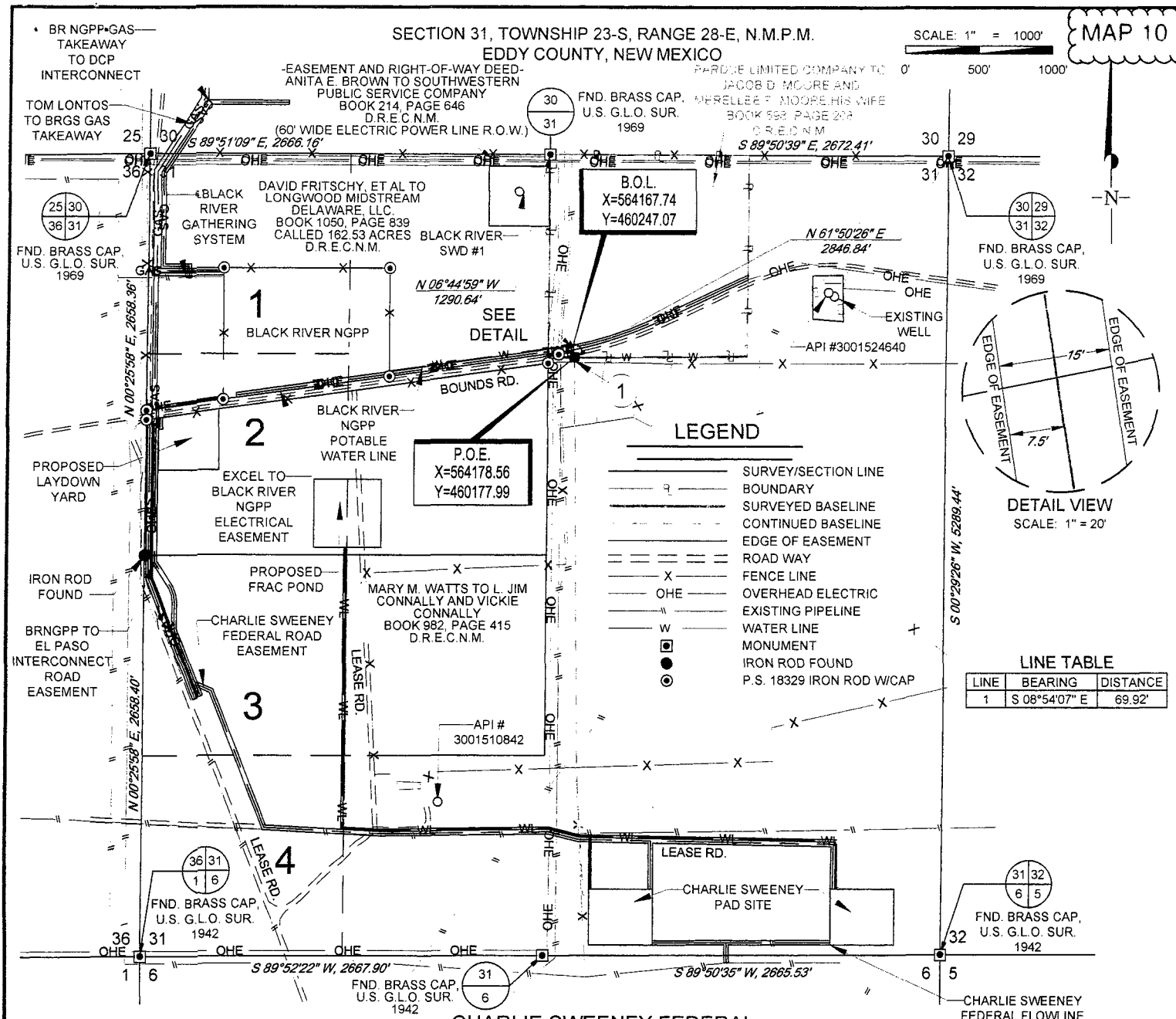

CHARLIE SWEENEY FEDERAL ELECTRIC EASEMENT

Being a proposed electric 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 69.92 feet or 4.24 rods, containing 0.02 acres more or less.

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

Matador PRODUCTION COMPANY

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DATE: 06/20/16		
FILE: EP CHARLIE SWEENEY FEDERAL ELECTRICAL LINE EASEMENT MOORE		
DRAWN BY: GJU		
SHEET : 1 OF 1		

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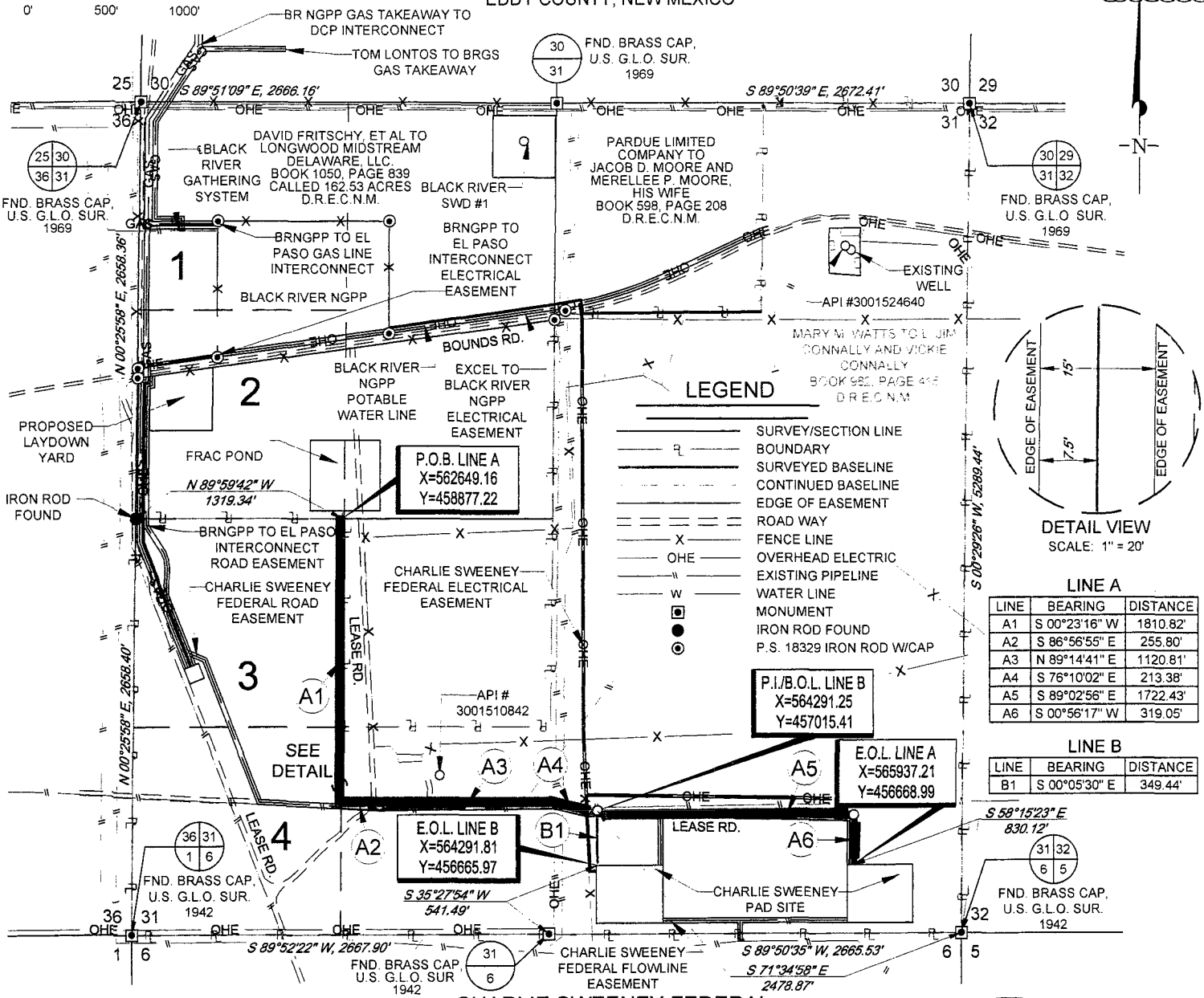
MAP 11

SCALE: 1" = 1000'

0' 500' 1000'

SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LINE A

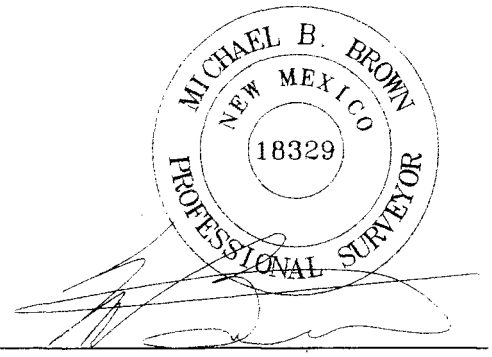
LINE	BEARING	DISTANCE
A1	S 00°23'16" W	1810.82'
A2	S 86°56'55" E	255.80'
A3	N 89°14'41" E	1120.81'
A4	S 76°10'02" E	213.38'
A5	S 89°02'56" E	1722.43'
A6	S 00°56'17" W	319.05'

LINE B

LINE	BEARING	DISTANCE
B1	S 00°05'30" E	349.44'

CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT

Being a proposed fast 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 5791.73 feet or 351.01 rods, containing 1.99 acres more or less.



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Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT	REVISION:
DATE: 06/20/16	
FILE: EP_CHARLIE_SWEENEY_FEDERAL_FAST_LINE_EASEMENT_CONNALLY	
DRAWN BY: MML	
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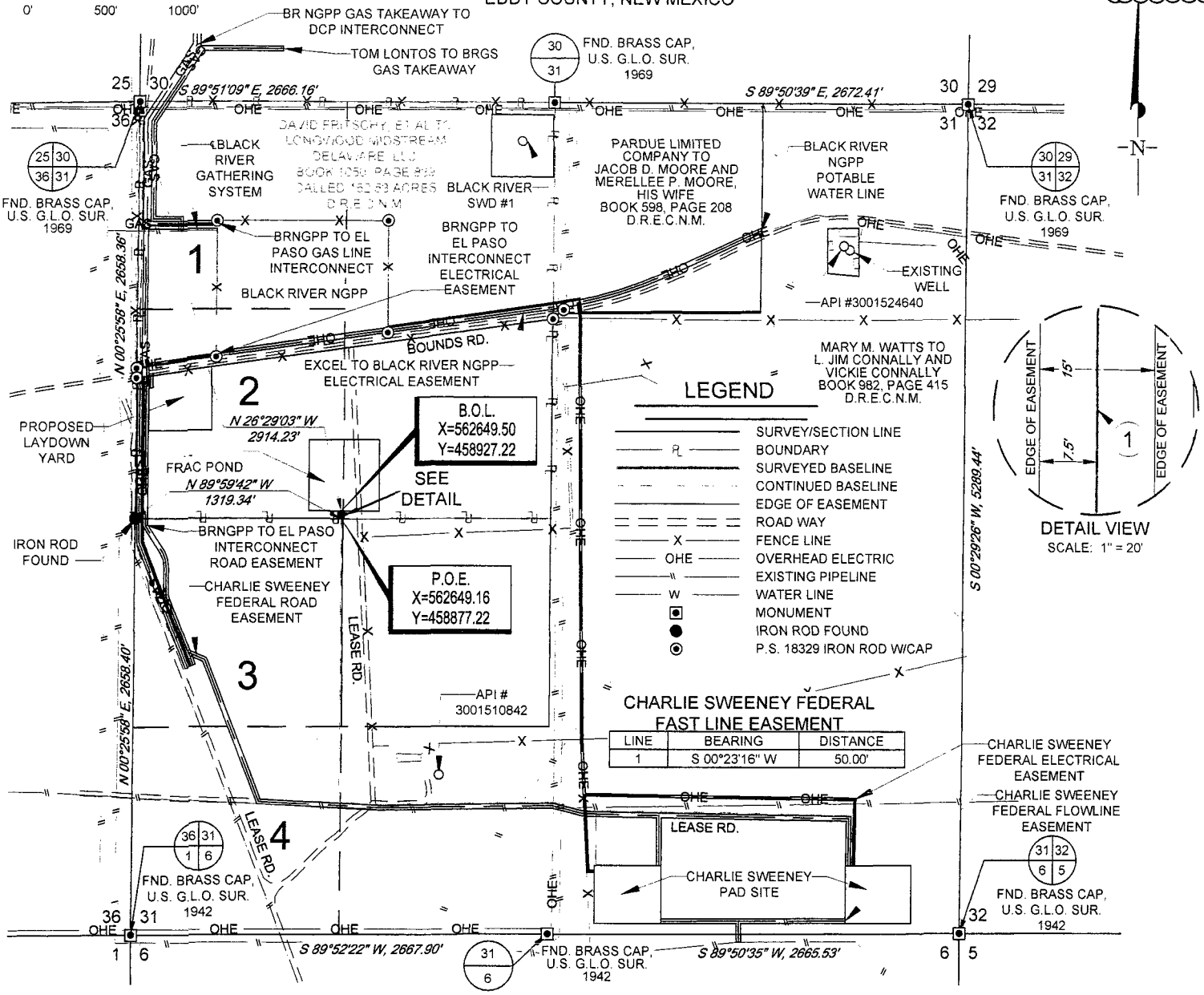
MAP 12

SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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



LEGEND

- SURVEY/SECTION LINE
- BOUNDARY
- SURVEYED BASELINE
- CONTINUED BASELINE
- EDGE OF EASEMENT
- ROAD WAY
- FENCE LINE
- OVERHEAD ELECTRIC
- EXISTING PIPELINE
- WATER LINE
- MONUMENT
- IRON ROD FOUND
- P.S. 18329 IRON ROD W/CAP

DETAIL VIEW
SCALE: 1" = 20'

CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT

LINE	BEARING	DISTANCE
1	S 00°23'16" W	50.00'

CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT

Being a proposed fast 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 50.00 feet or 3.03 rods, containing 0.02 acres more or less.

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

Matador PRODUCTION COMPANY

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CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT	REVISION:
DATE: 06/20/16	
FILE: EP_CHARLIE_SWEENEY_FEDERAL_FAST_LINE_EASEMENT_LONGWOOD	
DRAWN BY: MML	
SHEET: 1 OF 1	

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Matador Production Company **DRILL PLAN PAGE 1**
Charlie Sweeney Fed Com 228H
SHL 188' FSL & 545' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 330' FEL Sec. 31, T. 23 S., R. 28 E.
Eddy County, NM

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	Bearing
Quaternary	GL	Water
Eroded Salado/Rustler	460	Water/Salt
Castille	780	Salt
Base of Salt/Top of Anhydrite	2347	Barren
Lamar	2500	Barren
Bell Canyon	2533	Hydrocarbon
Cherry Canyon	3330	Hydrocarbon
Brushy Canyon	4524	Hydrocarbon
Bone Spring Lime	6067	Hydrocarbon
1st Bone Spring Sand	7012	Hydrocarbon
2nd Bone Spring Carbonate	7277	Hydrocarbon
2nd Bone Spring Sand	7657	Hydrocarbon
3rd Bone Spring Carbonate	7947	Hydrocarbon
3rd Bone Spring Sand	9032	Hydrocarbon
Wolfcamp	9487	Hydrocarbon
Wolfcamp B	10007	Hydrocarbon (& Target Formation)
TVD (Wolfcamp B)	10300	Hydrocarbon
MD (Wolfcamp B)	15056	Hydrocarbon

2. NOTABLE ZONES

Closest water well (C 02022/02955/03218) is 3211' west-northwest. Depth of well and depth to water have not been reported to the State. Proposed depth was 190'. Closest (≈4800' south) well (C 01244) with reported depths found water at 70'.

3. PRESSURE CONTROL

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 surface casing to TD. See attached BOP and choke manifold diagrams.

An accumulator that meets the requirements of Onshore Order 2 for the pressure rating of the BOP stack 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 recommended in Onshore Order 2. A 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. After surface casing is set and the BOP is nippled up, BOP pressure tests will be made to 250 psi low and 2000 psi high. On the intermediate #1, pressure tests will be made to 250 psi low and 3000 psi high. On the intermediate #2, pressure tests will be made to 250 psi low and 5000 psi high. Annular preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 psi low and 2500 psi high on the intermediate #1 and #2 casing. In the case of running a speed head with landing mandrel for 9-5/8" and 7" casing the initial, after surface casing is set, BOP 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. The BOP will then be lifted to install the 'C-section' of the wellhead. Matador will nipple the BOP back up and the pressure tests will be made to 250 psi low and 5000 psi high and the annular will be tested to 250 psi low and 2500 psi high.

Matador requests a variance to drill the 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, one of equal or higher rating will be used.

4. CASING & CEMENT

Hole will extend north of the drilling window to allow for pump installation. All perforations will be ≥330' from the dedication perimeter.

Hole O. D.	Set @ (MD)	Casing O. D.	Age	Weight (lb/ft)	Grade	Thread Collar	Collapse	Burst	Tension
17.5"	550'	13.375"	New	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	2600'	9.625"	New	40	J-55	BTC	1.125	1.125	1.8
8.75"	10470'	7"	New	29	P-110	BTC	1.125	1.125	1.8

6.125"	15056'	4.5"	New	13.5	P-110	BTC/TXP	1.125	1.125	1.8

Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	240	1.82	436.8	12.8	Class C + Bentonite + 2% $CaCl_2$ + 3% NaCl + LCM
	Tail	350	1.38	483	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2.III.B.1f	
Intermediate	Lead	550	2.13	1171.5	12.6	Class C + Bentonite + 1% $CaCl_2$ + 8% NaCl + LCM
	Tail	270	1.38	372.6	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th jt to surface	
Intermediate 2	Lead	600	2.13	1278	12.6	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	310	1.38	427.8	14.8	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 1500'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (500' above TOC)	
Production	Tail	500	1.17	585	15.8	Class H + Fluid Loss + Dispersant + Retarder + LCM
TOC = 9970'		25% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of curve	

5. MUD PROGRAM

Mud monitoring system will be an electronic Pason system satisfying the requirements of Onshore Order 1. 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 the hole condition.

Name	Hole Size	Mud Weight	Visc	Fluid Loss	Type Mud
Surface	17.5"	8.30	28	NC	FW Spud Mud
Intermediate	12.25"	10.00	30-32	NC	Brine Water
Intermediate 2	8.75"	8.00	30-31	NC	FW/Cut Brine
Production	6.125"	12.50	50-60	<10	OBM

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A 2-person mud-logging program will be used from 10400' to TD.

No electric logs are planned. GR will be collected through the MWD tools from intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to TOC.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈7510 psi. Expected bottom hole temperature is ≈170° F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H_2S from the surface to the Bone Spring to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since Matador has an H_2S safety package on all wells, attached is an "H_2S Drilling Operations Plan". 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

The anticipated spud date is upon approval. It is expected it will take ≈3 months to drill and complete the well.

Matador Resources

Eddy County, NM (NAD27 NME)
Charlie Sweeney Federal 31-23S-28E
228H

OH

Plan: Preliminary Plan 1

Standard Planning Report

05 January, 2016

PHOENIX
TECHNOLOGY SERVICES

Database:	Compass 5000 GCR	**Local Co-ordinate Reference:**	Well 228H
Company:	Matador Resources	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Project:	Eddy County, NM (NAD27 NME)	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site:	Charlie Sweeney Federal 31-23S-28E	**North Reference:**	Grid
Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Preliminary Plan 1		

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

Site Charlie Sweeney Federal 31-23S-28E

Site Position:		**Northing:**	456,416.00 usft	**Latitude:**	32° 15' 16.67754 N
From:	Map	**Easting:**	564,425.00 usft	**Longitude:**	104° 7' 29.74586 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.11 °

Well 228H

Well Position	**+N/-S**	3.00 usft	**Northing:**	456,419.00 usft	**Latitude:**	32° 15' 16.67463 N
	+E/-W	1,675.00 usft	**Easting:**	566,100.00 usft	**Longitude:**	104° 7' 10.23988 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,101.00 usft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	1/20/2016	7.48	60.10	48,252

Design Preliminary Plan 1

Audit Notes:

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

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.00	0.00	0.00	0.49

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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,266.67	4.00	122.94	1,266.45	-5.06	7.81	1.50	1.50	0.00	122.94	
2,750.00	4.00	122.94	2,746.17	-61.32	94.65	0.00	0.00	0.00	0.00	
3,016.68	8.00	122.94	3,011.33	-76.48	118.04	1.50	1.50	0.00	-0.01	
3,562.58	8.00	122.94	3,551.92	-117.79	181.80	0.00	0.00	0.00	0.00	
4,095.92	0.00	0.00	4,083.53	-138.00	213.00	1.50	-1.50	0.00	180.00	
9,726.42	0.00	0.00	9,714.03	-138.00	213.00	0.00	0.00	0.00	0.00	
10,476.42	75.00	0.49	10,267.46	286.65	216.63	10.00	10.00	0.00	0.49	
10,726.42	90.00	0.49	10,300.00	533.80	218.75	6.00	6.00	0.00	0.01	
15,055.78	90.00	0.49	10,300.00	4,863.00	256.00	0.00	0.00	0.00	0.00	BHL Sweeney 228H

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Site:	Charlie Sweeney Federal 31-23S-28E	**North Reference:**	Grid
Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Preliminary Plan 1		

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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.5°/100'									
1,100.00	1.50	122.94	1,099.99	-0.71	1.10	-0.70	1.50	1.50	0.00
1,200.00	3.00	122.94	1,199.91	-2.85	4.39	-2.81	1.50	1.50	0.00
1,266.67	4.00	122.94	1,266.45	-5.06	7.81	-4.99	1.50	1.50	0.00
Hold 4° Inc at 122.94° Azm									
1,300.00	4.00	122.94	1,299.70	-6.32	9.76	-6.24	0.00	0.00	0.00
1,400.00	4.00	122.94	1,399.46	-10.12	15.61	-9.98	0.00	0.00	0.00
1,500.00	4.00	122.94	1,499.22	-13.91	21.47	-13.73	0.00	0.00	0.00
1,600.00	4.00	122.94	1,598.97	-17 70	27.32	-17.47	0.00	0.00	0.00
1,700.00	4.00	122.94	1,698.73	-21.50	33.18	-21.21	0.00	0.00	0.00
1,800.00	4.00	122.94	1,798.48	-25.29	39.03	-24.95	0.00	0.00	0.00
1,900.00	4.00	122.94	1,898.24	-29.08	44.89	-28.70	0.00	0.00	0.00
2,000.00	4.00	122.94	1,998.00	-32.88	50.74	-32.44	0.00	0.00	0.00
2,100.00	4.00	122.94	2,097 75	-36.67	56.59	-36.18	0.00	0.00	0.00
2,200.00	4.00	122.94	2,197.51	-40.46	62.45	-39.93	0.00	0.00	0.00
2,300.00	4.00	122.94	2,297.27	-44.25	68.30	-43.67	0.00	0.00	0.00
2,400.00	4.00	122.94	2,397.02	-48.05	74.16	-47.41	0.00	0.00	0.00
2,500.00	4.00	122.94	2,496.78	-51.84	80.01	-51.15	0.00	0.00	0.00
2,600.00	4.00	122.94	2,596.54	-55.63	85.87	-54.90	0.00	0.00	0.00
9 5/8"									
2,700.00	4.00	122.94	2,696.29	-59.43	91.72	-58.64	0.00	0.00	0.00
2,750.00	4.00	122.94	2,746.17	-61.32	94.65	-60.51	0.00	0.00	0.00
Start Build 1.5°/100'									
2,800.00	4.75	122.94	2,796.02	-63.40	97.85	-62.56	1.50	1.50	0.00
2,900.00	6.25	122.94	2,895.56	-68.61	105.89	-67.70	1.50	1.50	0.00
3,000.00	7 75	122.94	2,994.81	-75.24	116.12	-74.24	1.50	1.50	0.00
3,016.68	8.00	122.94	3,011.33	-76.48	118.04	-75.47	1.50	1.50	0.00
Hold 8° Inc									
3,100.00	8.00	122.94	3,093.84	-82.78	127.77	-81.69	0.00	0.00	0.00
3,200.00	8.00	122.94	3,192.87	-90.35	139.45	-89.15	0.00	0.00	0.00
3,300.00	8.00	122.94	3,291.90	-97.92	151.13	-96.62	0.00	0.00	0.00
3,400.00	8.00	122.94	3,390.92	-105.48	162.81	-104.09	0.00	0.00	0.00
3,500.00	8.00	122.94	3,489.95	-113.05	174.49	-111.56	0.00	0.00	0.00
3,562.58	8.00	122.94	3,551.92	-117 79	181.80	-116.23	0.00	0.00	0.00
Start Drop 1.5°/100'									
3,600.00	7.44	122.94	3,589.00	-120.52	186.02	-118.93	1.50	-1.50	0.00
3,700.00	5.94	122.94	3,688.32	-126.85	195.79	-125.17	1.50	-1.50	0.00
3,800.00	4.44	122.94	3,787.91	-131.77	203.38	-130.03	1.50	-1.50	0.00
3,900.00	2.94	122.94	3,887.70	-135.27	208.78	-133.48	1.50	-1.50	0.00
4,000.00	1.44	122.94	3,987.62	-137.35	211.99	-135.53	1.50	-1.50	0.00
4,095.92	0.00	0.00	4,083.53	-138.00	213.00	-136.17	1.50	-1.50	-128.17

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Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Preliminary Plan 1		

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)
Hold Vertical									
4,100.00	0.00	0.00	4,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,200.00	0.00	0.00	4,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,300.00	0.00	0.00	4,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,400.00	0.00	0.00	4,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,500.00	0.00	0.00	4,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,600.00	0.00	0.00	4,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,700.00	0.00	0.00	4,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,800.00	0.00	0.00	4,787.61	-138.00	213.00	-136.17	0.00	0.00	0.00
4,900.00	0.00	0.00	4,887.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,000.00	0.00	0.00	4,987.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,100.00	0.00	0.00	5,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,200.00	0.00	0.00	5,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,300.00	0.00	0.00	5,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,400.00	0.00	0.00	5,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,500.00	0.00	0.00	5,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,600.00	0.00	0.00	5,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,700.00	0.00	0.00	5,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,800.00	0.00	0.00	5,787.61	-138.00	213.00	-136.17	0.00	0.00	0.00
5,900.00	0.00	0.00	5,887.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,000.00	0.00	0.00	5,987.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,100.00	0.00	0.00	6,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,200.00	0.00	0.00	6,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,300.00	0.00	0.00	6,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,400.00	0.00	0.00	6,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,500.00	0.00	0.00	6,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,600.00	0.00	0.00	6,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,700.00	0.00	0.00	6,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,800.00	0.00	0.00	6,787.61	-138.00	213.00	-136.17	0.00	0.00	0.00
6,900.00	0.00	0.00	6,887.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,000.00	0.00	0.00	6,987.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,100.00	0.00	0.00	7,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,200.00	0.00	0.00	7,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,300.00	0.00	0.00	7,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,400.00	0.00	0.00	7,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,500.00	0.00	0.00	7,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,600.00	0.00	0.00	7,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,700.00	0.00	0.00	7,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,800.00	0.00	0.00	7,787.61	-138.00	213.00	-136.17	0.00	0.00	0.00
7,900.00	0.00	0.00	7,887.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,000.00	0.00	0.00	7,987.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,100.00	0.00	0.00	8,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,200.00	0.00	0.00	8,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,300.00	0.00	0.00	8,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,400.00	0.00	0.00	8,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,500.00	0.00	0.00	8,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,600.00	0.00	0.00	8,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,700.00	0.00	0.00	8,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,800.00	0.00	0.00	8,787.61	-138.00	213.00	-136.17	0.00	0.00	0.00
8,900.00	0.00	0.00	8,887.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,000.00	0.00	0.00	8,987.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,100.00	0.00	0.00	9,087.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,200.00	0.00	0.00	9,187.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,300.00	0.00	0.00	9,287.61	-138.00	213.00	-136.17	0.00	0.00	0.00

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Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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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)
9,400.00	0.00	0.00	9,387.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,500.00	0.00	0.00	9,487.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,600.00	0.00	0.00	9,587.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,700.00	0.00	0.00	9,687.61	-138.00	213.00	-136.17	0.00	0.00	0.00
9,726.42	0.00	0.00	9,714.03	-138.00	213.00	-136.17	0.00	0.00	0.00
KOP: Start Build 10°/100' to 75° Inc									
9,750.00	2.36	0.49	9,737.60	-137.51	213.00	-135.69	10.00	10.00	0.00
9,800.00	7.36	0.49	9,787.41	-133.28	213.04	-131.46	10.00	10.00	0.00
9,850.00	12.36	0.49	9,836.66	-124.72	213.11	-122.90	10.00	10.00	0.00
9,900.00	17.36	0.49	9,884.97	-111.91	213.22	-110.08	10.00	10.00	0.00
9,950.00	22.36	0.49	9,931.98	-94.93	213.37	-93.10	10.00	10.00	0.00
10,000.00	27.36	0.49	9,977.33	-73.92	213.55	-72.09	10.00	10.00	0.00
10,050.00	32.36	0.49	10,020.68	-49.03	213.76	-47.20	10.00	10.00	0.00
10,100.00	37.36	0.49	10,061.70	-20.47	214.01	-18.64	10.00	10.00	0.00
10,150.00	42.36	0.49	10,100.07	11.57	214.28	13.40	10.00	10.00	0.00
10,200.00	47.36	0.49	10,135.50	46.82	214.58	48.65	10.00	10.00	0.00
10,250.00	52.36	0.49	10,167 72	85.03	214.91	86.87	10.00	10.00	0.00
10,300.00	57.36	0.49	10,196.49	125.90	215.26	127 74	10.00	10.00	0.00
10,350.00	62.36	0.49	10,221.59	169.13	215.63	170.96	10.00	10.00	0.00
10,400.00	67.36	0.49	10,242.83	214.37	216.01	216.21	10.00	10.00	0.00
10,450.00	72.36	0.49	10,260.04	261.30	216.41	263.14	10.00	10.00	0.00
10,476.42	75.00	0.49	10,267.47	286.65	216.63	288.49	10.00	10.00	0.00
Start Build 6°/100' - 7"									
10,500.00	76.41	0.49	10,273.29	309.50	216.83	311.34	6.00	6.00	0.00
10,550.00	79.41	0.49	10,283.75	358.38	217.25	360.23	6.00	6.00	0.00
10,600.00	82.41	0.49	10,291.65	407.75	217.67	409.60	6.00	6.00	0.00
10,650.00	85.41	0.49	10,296.95	457.46	218.10	459.31	6.00	6.00	0.00
10,700.00	88.41	0.49	10,299.64	507.38	218.52	509.23	6.00	6.00	0.00
10,726.42	90.00	0.49	10,300.00	533.80	218.75	535.65	6.00	6.00	0.00
LP: 90° Inc at 0.49° Azm									
10,800.00	90.00	0.49	10,300.00	607.37	219.38	609.23	0.00	0.00	0.00
10,900.00	90.00	0.49	10,300.00	707.37	220.25	709.23	0.00	0.00	0.00
11,000.00	90.00	0.49	10,300.00	807.37	221.11	809.23	0.00	0.00	0.00
11,100.00	90.00	0.49	10,300.00	907.36	221.97	909.23	0.00	0.00	0.00
11,200.00	90.00	0.49	10,300.00	1,007.36	222.83	1,009.23	0.00	0.00	0.00
11,300.00	90.00	0.49	10,300.00	1,107.35	223.69	1,109.23	0.00	0.00	0.00
11,400.00	90.00	0.49	10,300.00	1,207.35	224.55	1,209.23	0.00	0.00	0.00
11,500.00	90.00	0.49	10,300.00	1,307.35	225.41	1,309.23	0.00	0.00	0.00
11,600.00	90.00	0.49	10,300.00	1,407.34	226.27	1,409.23	0.00	0.00	0.00
11,700.00	90.00	0.49	10,300.00	1,507.34	227.13	1,509.23	0.00	0.00	0.00
11,800.00	90.00	0.49	10,300.00	1,607.34	227.99	1,609.23	0.00	0.00	0.00
11,900.00	90.00	0.49	10,300.00	1,707.33	228.85	1,709.23	0.00	0.00	0.00
12,000.00	90.00	0.49	10,300.00	1,807.33	229.71	1,809.23	0.00	0.00	0.00
12,100.00	90.00	0.49	10,300.00	1,907.33	230.57	1,909.23	0.00	0.00	0.00
12,200.00	90.00	0.49	10,300.00	2,007.32	231.43	2,009.23	0.00	0.00	0.00
12,300.00	90.00	0.49	10,300.00	2,107.32	232.29	2,109.23	0.00	0.00	0.00
12,400.00	90.00	0.49	10,300.00	2,207.31	233.15	2,209.23	0.00	0.00	0.00
12,500.00	90.00	0.49	10,300.00	2,307.31	234.01	2,309.23	0.00	0.00	0.00
12,600.00	90.00	0.49	10,300.00	2,407.31	234.87	2,409.23	0.00	0.00	0.00
12,700.00	90.00	0.49	10,300.00	2,507.30	235.73	2,509.23	0.00	0.00	0.00
12,800.00	90.00	0.49	10,300.00	2,607.30	236.59	2,609.23	0.00	0.00	0.00
12,900.00	90.00	0.49	10,300.00	2,707.30	237.45	2,709.23	0.00	0.00	0.00
13,000.00	90.00	0.49	10,300.00	2,807.29	238.31	2,809.23	0.00	0.00	0.00

Database:	Compass 5000 GCR	**Local Co-ordinate Reference:**	Well 228H
Company:	Matador Resources	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Project:	Eddy County, NM (NAD27 NME)	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site:	Charlie Sweeney Federal 31-23S-28E	**North Reference:**	Grid
Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Preliminary Plan 1		

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)
13,100.00	90.00	0.49	10,300.00	2,907.29	239.17	2,909.23	0.00	0.00	0.00
13,200.00	90.00	0.49	10,300.00	3,007.28	240.03	3,009.23	0.00	0.00	0.00
13,300.00	90.00	0.49	10,300.00	3,107.28	240.89	3,109.23	0.00	0.00	0.00
13,400.00	90.00	0.49	10,300.00	3,207.28	241.75	3,209.23	0.00	0.00	0.00
13,500.00	90.00	0.49	10,300.00	3,307.27	242.61	3,309.23	0.00	0.00	0.00
13,600.00	90.00	0.49	10,300.00	3,407.27	243.48	3,409.23	0.00	0.00	0.00
13,700.00	90.00	0.49	10,300.00	3,507.27	244.34	3,509.23	0.00	0.00	0.00
13,800.00	90.00	0.49	10,300.00	3,607.26	245.20	3,609.23	0.00	0.00	0.00
13,900.00	90.00	0.49	10,300.00	3,707.26	246.06	3,709.23	0.00	0.00	0.00
14,000.00	90.00	0.49	10,300.00	3,807.25	246.92	3,809.23	0.00	0.00	0.00
14,100.00	90.00	0.49	10,300.00	3,907.25	247.78	3,909.23	0.00	0.00	0.00
14,200.00	90.00	0.49	10,300.00	4,007.25	248.64	4,009.23	0.00	0.00	0.00
14,300.00	90.00	0.49	10,300.00	4,107.24	249.50	4,109.23	0.00	0.00	0.00
14,400.00	90.00	0.49	10,300.00	4,207.24	250.36	4,209.23	0.00	0.00	0.00
14,500.00	90.00	0.49	10,300.00	4,307.24	251.22	4,309.23	0.00	0.00	0.00
14,600.00	90.00	0.49	10,300.00	4,407.23	252.08	4,409.23	0.00	0.00	0.00
14,700.00	90.00	0.49	10,300.00	4,507.23	252.94	4,509.23	0.00	0.00	0.00
14,800.00	90.00	0.49	10,300.00	4,607.23	253.80	4,609.23	0.00	0.00	0.00
14,900.00	90.00	0.49	10,300.00	4,707.22	254.66	4,709.23	0.00	0.00	0.00
15,000.00	90.00	0.49	10,300.00	4,807.22	255.52	4,809.23	0.00	0.00	0.00
15,055.78	90.00	0.49	10,300.00	4,863.00	256.00	4,865.01	0.00	0.00	0.00
TD at 15055.78									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FPP Sweeney 228H - plan misses target center by 82.19usft at 10358.76usft MD (10225.60 TVD, 176.92 N, 215.69 E) - Point	0.00	0.00	10,300.00	142.00	216.00	456,561.00	566,316.00	32° 15' 18.07564 N	104° 7' 7.72118 W
BHL Sweeney 228H - plan hits target center - Point	0.00	0.00	10,300.00	4,863.00	256.00	461,282.00	566,356.00	32° 16' 4.79506 N	104° 7' 7.14541 W
LPP Sweeney 228H - plan misses target center by 0.77usft at 14965.79usft MD (10300.00 TVD, 4773.01 N, 255.23 E) - Point	0.00	0.00	10,300.00	4,773.00	256.00	461,192.00	566,356.00	32° 16' 3.90440 N	104° 7' 7.14751 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
600.00	600.00	13 3/8"	13-3/8	17-1/2
2,600.00	2,596.54	9 5/8"	9-5/8	12-1/4
10,476.42	10,267.47	7"	7	7-1/2

Database:	Compass 5000 GCR	**Local Co-ordinate Reference:**	Well 228H
Company:	Matador Resources	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Project:	Eddy County, NM (NAD27 NME)	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site:	Charlie Sweeney Federal 31-23S-28E	**North Reference:**	Grid
Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Preliminary Plan 1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,000.00	1,000.00	0.00	0.00	Start Build 1.5°/100'
1,266.67	1,266.45	-5.06	7.81	Hold 4° Inc at 122.94° Azm
2,750.00	2,746.17	-61.32	94.65	Start Build 1.5°/100'
3,016.68	3,011.33	-76.48	118.04	Hold 8° Inc
3,562.58	3,551.92	-117.79	181.80	Start Drop 1.5°/100'
4,095.92	4,083.53	-138.00	213.00	Hold Vertical
9,726.42	9,714.03	-138.00	213.00	KOP: Start Build 10°/100' to 75° Inc
10,476.42	10,267.46	286.65	216.63	Start Build 6°/100'
10,726.42	10,300.00	533.80	218.75	LP: 90° Inc at 0.49° Azm
15,055.78	10,300.00	4,863.00	256.00	TD at 15055.78

Project: Eddy County, NM (NAD27 NME)
Site: Charlie Sweeney Federal 31-23S-28E
Well: 228H
Wellbore: OH
Design: Preliminary Plan 1
Rig: Patterson 297

PHOENIX TECHNOLOGY SERVICES

Azimuths to Grid North
True North: -0.11°
Magnetic North: 7.37°

Magnetic Field
Strength: 48252.1snT
Dip Angle: 60.10°
Date: 1/20/2016
Model: HDGM

WELL DETAILS

Ground Level: 3101.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	456419.00	566100.00	32° 15' 16.67463 N	104° 7' 10.23988 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Start Build 1.5°/100'
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00		Hold 4° Inc at 122.94° Azm
3	1266.67	4.00	122.94	1266.45	-5.06	7.81	1.50	122.94	-4.99		Start Build 1.5°/100'
4	2760.00	4.00	122.94	2746.17	-61.32	94.65	0.00	0.00	-60.51		Hold 8° Inc
5	3016.68	8.00	122.94	3011.33	-76.48	118.04	1.50	-0.01	-75.47		Start Drop 1.5°/100'
6	3562.58	8.00	122.94	3551.92	-117.79	181.80	0.00	0.00	-116.23		Hold Vertical
7	4095.92	0.00	0.00	4083.53	-138.00	213.00	1.50	180.00	-136.17		KOP: Start Build 10°/100' to 75° Inc
8	9726.42	0.00	0.00	9714.03	-138.00	213.00	0.00	0.00	-136.17		Start Build 6°/100'
9	10476.42	75.00	0.49	10267.46	286.65	216.63	10.00	0.49	288.49		LP: 90° Inc at 0.49° Azm
10	10726.42	90.00	0.49	10300.00	533.80	218.75	6.00	0.01	535.65		TD at 15055.78
11	15055.78	90.00	0.49	10300.00	4863.00	256.00	0.00	0.00	4865.01	BHL Sweeney 228H	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL Sweeney 228H	10300.00	4863.00	256.00	461282.00	566356.00	32° 16' 4.79506 N	104° 7' 7.14541 W
FPP Sweeney 228H	10300.00	142.00	216.00	456561.00	566316.00	32° 15' 18.07564 N	104° 7' 7.72118 W
LPP Sweeney 228H	10300.00	4773.00	256.00	461192.00	566356.00	32° 16' 3.90440 N	104° 7' 7.14751 W

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well 228H, Grid North

Latitude: 32° 15' 16.67463 N
Longitude: 104° 7' 10.23988 W

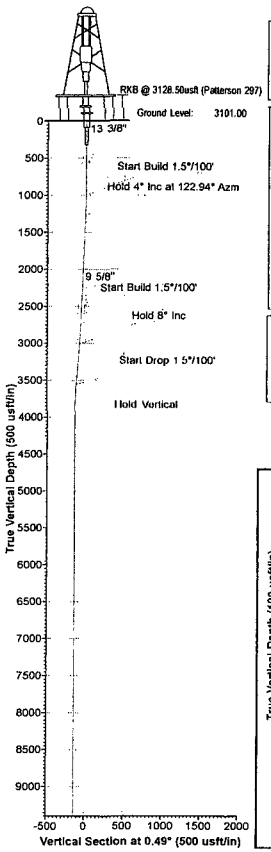
Grid East: 566100.00
Grid North: 456419.00
Scale Factor: 1.000

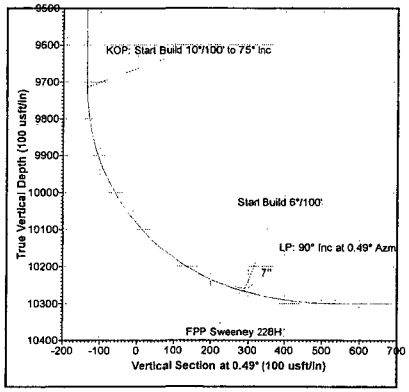
Geomagnetic Model: HDGM
Sample Date: 20-Jan-16
Magnetic Declination: 7.48°
Dip Angle from Horizontal: 60.10°
Magnetic Field Strength: 48252

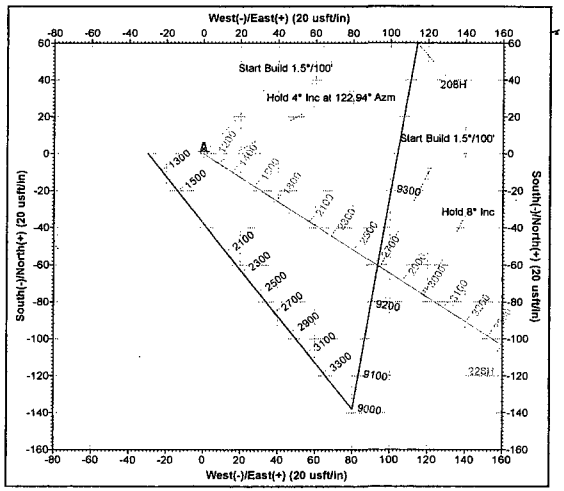
To convert a Magnetic Direction to a True Direction, Add 7.48° East
To convert a True Direction to a Grid Direction, Subtract 0.11°

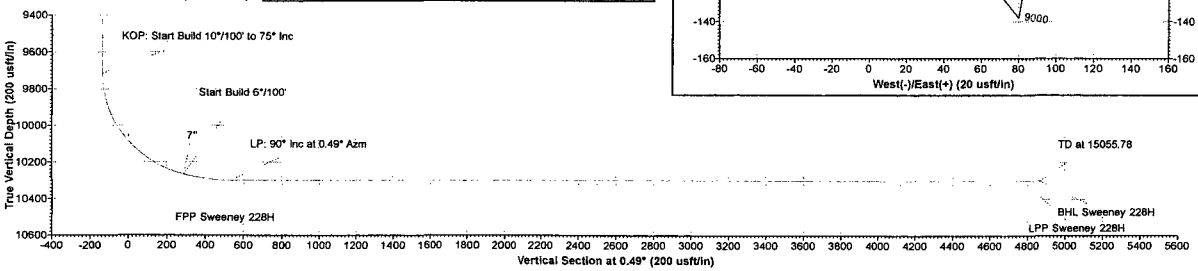
LEGEND

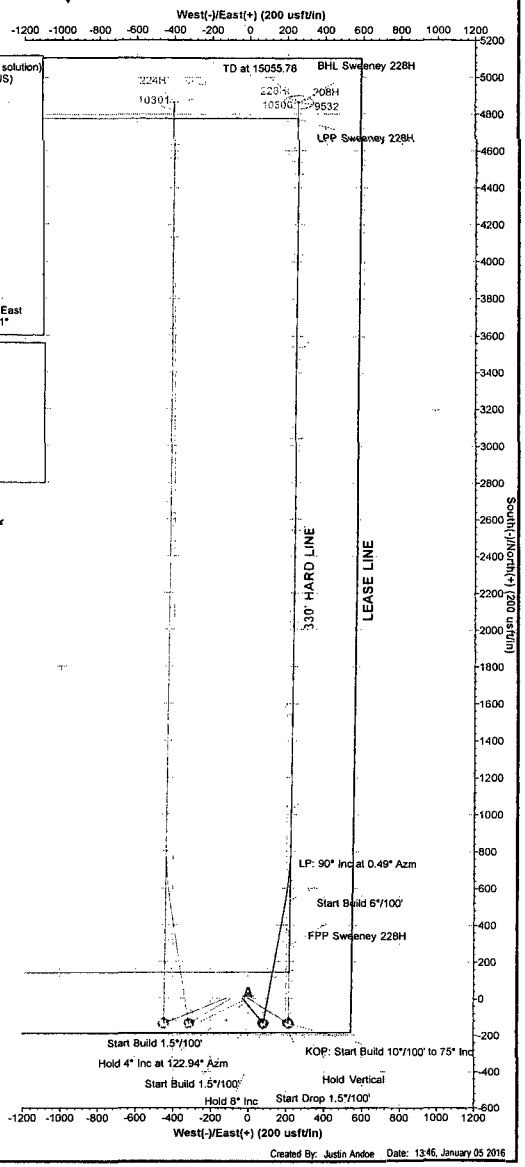
- 208H, OH, Preliminary Plan 1 V0
- 204H, OH, Preliminary Plan 1 V0
- 124H, OH, Preliminary Plan 1 V0
- 224H, OH, Preliminary Plan 1 V0
- Preliminary Plan 1











Created By: Justin Andoe Date: 13:46, January 05 2016

Matador Resources

Eddy County, NM (NAD27 NME)
Charlie Sweeney Federal 31-23S-28E
228H

OH
Preliminary Plan 1

Anticollision Report

05 January, 2016

PHOENIX
TECHNOLOGY SERVICES

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Reference	Preliminary Plan 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 5,000.00 usft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 1/5/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,055.78	Preliminary Plan 1 (OH)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Charlie Sweeney Federal 31-23S-28E						
124H - OH - Preliminary Plan 1	1,000.00	1,000.00	60.00	53.29	8.939	CC, ES
124H - OH - Preliminary Plan 1	7,600.00	7,577.99	334.23	281.36	6.322	SF
204H - OH - Preliminary Plan 1	1,000.00	1,000.00	90.00	83.29	13.408	CC, ES
204H - OH - Preliminary Plan 1	9,100.00	9,081.48	530.51	466.90	8.340	SF
208H - OH - Preliminary Plan 1	1,000.00	1,000.00	30.00	23.29	4.469	CC
208H - OH - Preliminary Plan 1	1,100.00	1,100.49	30.28	22.88	4.092	ES
208H - OH - Preliminary Plan 1	9,117.72	9,113.41	131.07	67.38	2.058	SF
224H - OH - Preliminary Plan 1	1,000.00	999.00	120.00	113.29	17.887	CC, ES
224H - OH - Preliminary Plan 1	15,055.78	15,068.02	660.00	501.38	4.161	SF

Offset Design Charlie Sweeney Federal 31-23S-28E - 124H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-60.00	60.00				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-60.00	60.00	59.74	0.26	230.865	
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-60.00	60.00	59.02	0.98	61.423	
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-60.00	60.00	58.31	1.69	35.424	
400.00	400.00	400.00	400.00	1.21	1.21	-90.00	0.00	-60.00	60.00	57.59	2.41	24.889	
500.00	500.00	500.00	500.00	1.56	1.56	-90.00	0.00	-60.00	60.00	56.87	3.13	19.184	
600.00	600.00	600.00	600.00	1.92	1.92	-90.00	0.00	-60.00	60.00	56.16	3.84	15.606	
700.00	700.00	700.00	700.00	2.28	2.28	-90.00	0.00	-60.00	60.00	55.44	4.56	13.153	
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-60.00	60.00	54.72	5.28	11.367	
900.00	900.00	900.00	900.00	3.00	3.00	-90.00	0.00	-60.00	60.00	54.00	6.00	10.008	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.00	0.00	-60.00	60.00	53.29	6.71	8.939	CC, ES
1,100.00	1,099.99	1,099.38	1,099.37	3.70	3.70	146.59	-1.19	-60.49	61.60	54.20	7.40	8.329	
1,200.00	1,199.91	1,198.59	1,198.50	4.04	4.02	145.33	-4.77	-61.97	66.41	58.35	8.05	8.245	
1,266.67	1,266.45	1,264.55	1,264.34	4.26	4.24	144.19	-8.46	-63.50	71.42	62.92	8.50	8.406	
1,300.00	1,299.70	1,297.74	1,297.45	4.38	4.36	143.62	-10.60	-64.38	74.30	65.58	8.72	8.519	
1,400.00	1,399.46	1,397.34	1,396.81	4.72	4.69	142.14	-17.02	-67.03	82.97	73.57	9.40	8.827	
1,500.00	1,499.22	1,496.95	1,496.17	5.07	5.03	140.94	-23.43	-69.68	91.69	81.61	10.09	9.090	
1,600.00	1,598.97	1,596.55	1,595.53	5.43	5.38	139.96	-29.85	-72.33	100.45	89.67	10.78	9.317	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 124H - OH - Preliminary Plan 1 — *Offset Site Error:* 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — *Offset Well Error:* 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,700.00	1,698.73	1,696.15	1,694.89	5.78	5.73	139.13	-36.26	-74.98	109.22	97.75	11.48	9.515	
1,800.00	1,798.48	1,795.75	1,794.25	6.14	6.08	138.42	-42.67	-77.63	118.02	105.84	12.18	9.688	
1,900.00	1,898.24	1,895.36	1,893.61	6.50	6.44	137.81	-49.09	-80.28	126.84	113.95	12.89	9.841	
2,000.00	1,998.00	1,994.96	1,992.97	6.86	6.80	137.28	-55.50	-82.93	135.66	122.06	13.60	9.976	
2,100.00	2,097.75	2,094.56	2,092.33	7.22	7.15	136.82	-61.92	-85.58	144.50	130.19	14.31	10.097	
2,200.00	2,197.51	2,194.16	2,191.69	7.58	7.51	136.41	-68.33	-88.22	153.34	138.32	15.02	10.206	
2,300.00	2,297.27	2,293.77	2,291.05	7.94	7.87	136.04	-74.75	-90.87	162.19	146.45	15.74	10.304	
2,400.00	2,397.02	2,393.37	2,390.41	8.31	8.23	135.71	-81.16	-93.52	171.05	154.59	16.46	10.393	
2,500.00	2,496.78	2,492.97	2,489.77	8.67	8.60	135.41	-87.58	-96.17	179.91	162.73	17.18	10.474	
2,600.00	2,596.54	2,592.57	2,589.13	9.04	8.96	135.15	-93.99	-98.82	188.77	170.88	17.90	10.547	
2,700.00	2,696.29	2,692.18	2,688.49	9.40	9.32	134.90	-100.41	-101.47	197.64	179.03	18.62	10.615	
2,750.00	2,746.17	2,741.98	2,738.17	9.59	9.51	134.79	-103.61	-102.80	202.08	183.10	18.98	10.647	
2,800.00	2,796.02	2,791.76	2,787.84	9.77	9.69	134.69	-106.82	-104.12	206.75	187.41	19.33	10.694	
2,900.00	2,895.56	2,891.18	2,887.01	10.14	10.05	134.87	-113.22	-106.77	217.46	197.42	20.04	10.853	
3,000.00	2,994.81	2,990.34	2,985.93	10.52	10.41	135.46	-119.61	-109.40	230.02	209.28	20.74	11.093	
3,016.68	3,011.33	3,006.85	3,002.40	10.59	10.48	135.59	-120.67	-109.84	232.30	211.45	20.85	11.141	
3,100.00	3,093.84	3,089.31	3,084.66	10.91	10.78	136.36	-125.98	-112.04	243.84	222.38	21.46	11.363	
3,200.00	3,192.87	3,189.95	3,185.08	11.30	11.15	137.27	-132.19	-114.60	257.59	235.40	22.19	11.606	
3,300.00	3,291.90	3,292.68	3,287.70	11.68	11.52	138.52	-136.36	-116.32	270.24	247.30	22.93	11.784	
3,400.00	3,390.92	3,395.43	3,390.44	12.07	11.87	140.15	-137.98	-116.99	281.68	258.03	23.66	11.908	
3,500.00	3,489.95	3,494.94	3,489.95	12.47	12.21	141.90	-138.00	-117.00	292.56	268.20	24.36	12.011	
3,562.58	3,551.92	3,556.91	3,551.92	12.71	12.42	142.92	-138.00	-117.00	299.48	274.69	24.80	12.078	
3,600.00	3,589.00	3,594.00	3,589.00	12.86	12.54	143.53	-138.00	-117.00	303.52	278.45	25.07	12.105	
3,700.00	3,688.32	3,693.31	3,688.32	13.24	12.88	144.88	-138.00	-117.00	312.99	287.18	25.82	12.124	
3,800.00	3,787.91	3,792.90	3,787.91	13.62	13.21	145.87	-138.00	-117.00	320.45	293.90	26.55	12.071	
3,900.00	3,887.70	3,892.69	3,887.70	13.99	13.55	146.55	-138.00	-117.00	325.80	298.53	27.26	11.950	
4,000.00	3,987.62	3,992.61	3,987.62	14.35	13.89	146.94	-138.00	-117.00	328.99	301.02	27.97	11.763	
4,095.92	4,083.53	4,088.52	4,083.53	14.68	14.22	-90.00	-138.00	-117.00	330.00	301.38	28.62	11.529	
4,100.00	4,087.61	4,092.60	4,087.61	14.69	14.23	-90.00	-138.00	-117.00	330.00	301.35	28.65	11.518	
4,200.00	4,187.61	4,192.60	4,187.61	15.02	14.58	-90.00	-138.00	-117.00	330.00	300.67	29.33	11.252	
4,300.00	4,287.61	4,292.60	4,287.61	15.36	14.92	-90.00	-138.00	-117.00	330.00	299.99	30.01	10.997	
4,400.00	4,387.61	4,392.60	4,387.61	15.69	15.26	-90.00	-138.00	-117.00	330.00	299.31	30.69	10.752	
4,500.00	4,487.61	4,492.60	4,487.61	16.03	15.61	-90.00	-138.00	-117.00	330.00	298.63	31.38	10.518	
4,600.00	4,587.61	4,592.60	4,587.61	16.36	15.95	-90.00	-138.00	-117.00	330.00	297.94	32.06	10.293	
4,700.00	4,687.61	4,692.60	4,687.61	16.70	16.30	-90.00	-138.00	-117.00	330.00	297.25	32.75	10.077	
4,800.00	4,787.61	4,792.60	4,787.61	17.04	16.64	-90.00	-138.00	-117.00	330.00	296.57	33.43	9.870	
4,900.00	4,887.61	4,892.60	4,887.61	17.38	16.99	-90.00	-138.00	-117.00	330.00	295.88	34.12	9.671	
5,000.00	4,987.61	4,992.60	4,987.61	17.72	17.34	-90.00	-138.00	-117.00	330.00	295.19	34.81	9.479	
5,100.00	5,087.61	5,092.60	5,087.61	18.06	17.68	-90.00	-138.00	-117.00	330.00	294.50	35.50	9.295	
5,200.00	5,187.61	5,192.60	5,187.61	18.40	18.03	-90.00	-138.00	-117.00	330.00	293.80	36.20	9.117	
5,300.00	5,287.61	5,292.60	5,287.61	18.74	18.38	-90.00	-138.00	-117.00	330.00	293.11	36.89	8.946	
5,400.00	5,387.61	5,392.60	5,387.61	19.09	18.73	-90.00	-138.00	-117.00	330.00	292.42	37.58	8.781	
5,500.00	5,487.61	5,492.60	5,487.61	19.43	19.08	-90.00	-138.00	-117.00	330.00	291.72	38.28	8.621	
5,600.00	5,587.61	5,592.60	5,587.61	19.78	19.43	-90.00	-138.00	-117.00	330.00	291.03	38.97	8.467	
5,700.00	5,687.61	5,692.60	5,687.61	20.12	19.78	-90.00	-138.00	-117.00	330.00	290.33	39.67	8.319	
5,800.00	5,787.61	5,792.60	5,787.61	20.46	20.13	-90.00	-138.00	-117.00	330.00	289.63	40.37	8.175	
5,900.00	5,887.61	5,892.60	5,887.61	20.81	20.48	-90.00	-138.00	-117.00	330.00	288.94	41.06	8.036	
6,000.00	5,987.61	5,992.60	5,987.61	21.16	20.83	-90.00	-138.00	-117.00	330.00	288.24	41.76	7.902	
6,100.00	6,087.61	6,092.60	6,087.61	21.50	21.18	-90.00	-138.00	-117.00	330.00	287.54	42.46	7.772	
6,200.00	6,187.61	6,192.60	6,187.61	21.85	21.53	-90.00	-138.00	-117.00	330.00	286.84	43.16	7.646	
6,300.00	6,287.61	6,292.60	6,287.61	22.20	21.88	-90.00	-138.00	-117.00	330.00	286.14	43.86	7.524	
6,400.00	6,387.61	6,392.60	6,387.61	22.54	22.23	-90.00	-138.00	-117.00	330.00	285.44	44.56	7.405	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 124H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,500.00	6,487.61	6,492.60	6,487.61	22.89	22.58	-90.00	-138.00	-117.00	330.00	284.74	45.26	7.291	
6,600.00	6,587.61	6,592.60	6,587.61	23.24	22.94	-90.00	-138.00	-117.00	330.00	284.03	45.97	7.179	
6,700.00	6,687.61	6,692.60	6,687.61	23.59	23.29	-90.00	-138.00	-117.00	330.00	283.33	46.67	7.071	
6,800.00	6,787.61	6,792.60	6,787.61	23.94	23.64	-90.00	-138.00	-117.00	330.00	282.63	47.37	6.966	
6,900.00	6,887.61	6,892.60	6,887.61	24.28	23.99	-90.00	-138.00	-117.00	330.00	281.93	48.07	6.865	
7,000.00	6,987.61	6,992.60	6,987.61	24.63	24.35	-90.00	-138.00	-117.00	330.00	281.22	48.78	6.766	
7,100.00	7,087.61	7,092.60	7,087.61	24.98	24.70	-90.00	-138.00	-117.00	330.00	280.52	49.48	6.669	
7,200.00	7,187.61	7,192.60	7,187.61	25.33	25.05	-90.00	-138.00	-117.00	330.00	279.82	50.18	6.576	
7,300.00	7,287.61	7,292.60	7,287.61	25.68	25.41	-90.00	-138.00	-117.00	330.00	279.11	50.89	6.485	
7,398.37	7,385.98	7,391.07	7,385.98	26.03	25.75	-89.51	-135.16	-116.98	329.99	278.41	51.58	6.398	
7,400.00	7,387.61	7,392.69	7,387.59	26.03	25.76	-89.48	-135.00	-116.97	329.99	278.40	51.59	6.396	
7,500.00	7,487.61	7,489.46	7,482.57	26.38	26.08	-86.36	-117.05	-116.82	330.52	278.27	52.25	6.325	
7,600.00	7,587.61	7,577.99	7,565.70	26.73	26.36	-81.18	-86.84	-116.56	334.23	281.36	52.87	6.322 SF	
7,700.00	7,687.61	7,655.71	7,634.08	27.09	26.58	-75.04	-50.05	-116.24	344.97	291.53	53.44	6.455	
7,800.00	7,787.61	7,722.14	7,688.14	27.44	26.77	-68.96	-11.51	-115.91	366.17	312.20	53.97	6.785	
7,900.00	7,887.61	7,778.17	7,730.02	27.79	26.93	-63.52	25.68	-115.59	399.50	345.04	54.46	7.335	
8,000.00	7,987.61	7,825.21	7,762.23	28.14	27.06	-58.91	59.94	-115.30	444.70	389.77	54.93	8.096	
8,100.00	8,087.61	7,864.76	7,787.06	28.49	27.17	-55.11	90.71	-115.03	500.25	444.88	55.37	9.035	
8,200.00	8,187.61	7,900.00	7,807.35	28.84	27.27	-51.85	119.52	-114.79	564.23	508.43	55.80	10.112	
8,300.00	8,287.61	7,926.61	7,821.48	29.19	27.34	-49.47	142.06	-114.59	634.85	578.64	56.20	11.296	
8,400.00	8,387.61	7,950.00	7,833.03	29.55	27.41	-47.46	162.41	-114.42	710.64	654.04	56.60	12.556	
8,500.00	8,487.61	7,972.02	7,843.13	29.90	27.48	-45.64	181.97	-114.25	790.46	733.48	56.99	13.871	
8,600.00	8,587.61	8,000.00	7,854.86	30.25	27.56	-43.44	207.37	-114.03	873.58	816.20	57.38	15.224	
8,700.00	8,687.61	8,000.00	7,854.86	30.60	27.56	-43.44	207.37	-114.03	959.01	901.27	57.74	16.610	
8,800.00	8,787.61	8,020.54	7,862.68	30.96	27.62	-41.90	226.36	-113.87	1,046.47	988.35	58.12	18.006	
8,900.00	8,887.61	8,033.11	7,867.13	31.31	27.66	-40.98	238.11	-113.77	1,135.62	1,077.13	58.49	19.416	
9,000.00	8,987.61	8,050.00	7,872.70	31.66	27.71	-39.80	254.06	-113.63	1,226.15	1,167.28	58.86	20.830	
9,100.00	9,087.61	8,050.00	7,872.70	32.02	27.71	-39.80	254.06	-113.63	1,317.73	1,258.51	59.22	22.252	
9,200.00	9,187.61	8,050.00	7,872.70	32.37	27.71	-39.80	254.06	-113.63	1,410.46	1,350.89	59.57	23.676	
9,300.00	9,287.61	8,071.73	7,879.16	32.72	27.78	-38.34	274.81	-113.45	1,503.56	1,443.61	59.95	25.081	
9,400.00	9,387.61	8,079.23	7,881.21	33.08	27.81	-37.85	282.02	-113.39	1,597.55	1,537.24	60.31	26.489	
9,500.00	9,487.61	8,100.00	7,886.39	33.43	27.87	-36.55	302.13	-113.22	1,692.35	1,631.66	60.69	27.887	
9,600.00	9,587.61	8,100.00	7,886.39	33.78	27.87	-36.55	302.13	-113.22	1,787.25	1,726.21	61.04	29.280	
9,700.00	9,687.61	8,100.00	7,886.39	34.14	27.87	-36.55	302.13	-113.22	1,882.69	1,821.29	61.40	30.665	
9,726.42	9,714.03	8,100.00	7,886.39	34.23	27.87	-36.55	302.13	-113.22	1,907.98	1,846.49	61.49	31.029	
9,750.00	9,737.60	8,100.00	7,886.39	34.31	27.87	-32.77	302.13	-113.22	1,930.46	1,868.97	61.49	31.394	
9,800.00	9,787.41	8,100.00	7,886.39	34.49	27.87	-26.14	302.13	-113.22	1,977.34	1,916.07	61.28	32.270	
9,850.00	9,836.66	8,100.00	7,886.39	34.66	27.87	-21.64	302.13	-113.22	2,022.92	1,962.24	60.68	33.335	
9,900.00	9,884.97	8,100.00	7,886.39	34.82	27.87	-18.45	302.13	-113.22	2,066.95	2,007.26	59.69	34.627	
9,950.00	9,931.98	8,100.00	7,886.39	34.98	27.87	-16.11	302.13	-113.22	2,109.20	2,050.90	58.30	36.177	
10,000.00	9,977.33	8,125.86	7,891.82	35.12	27.95	-14.11	327.41	-113.00	2,148.74	2,092.19	56.55	37.999	
10,050.00	10,020.68	8,150.00	7,895.85	35.26	28.03	-12.63	351.21	-112.79	2,186.72	2,132.29	54.44	40.170	
10,100.00	10,061.70	8,150.00	7,895.85	35.38	28.03	-11.60	351.21	-112.79	2,221.68	2,169.70	51.98	42.740	
10,150.00	10,100.07	8,150.00	7,895.85	35.49	28.03	-10.77	351.21	-112.79	2,254.09	2,204.86	49.23	45.785	
10,200.00	10,135.50	8,150.00	7,895.85	35.59	28.03	-10.10	351.21	-112.79	2,283.83	2,237.60	46.23	49.399	
10,250.00	10,167.72	8,150.00	7,895.85	35.69	28.03	-9.56	351.21	-112.79	2,310.77	2,267.73	43.04	53.694	
10,300.00	10,196.49	8,173.08	7,898.76	35.80	28.11	-9.07	374.10	-112.60	2,334.24	2,294.50	39.74	58.735	
10,350.00	10,221.59	8,200.00	7,900.99	35.92	28.20	-8.68	400.93	-112.37	2,355.11	2,318.68	36.42	64.661	
10,400.00	10,242.83	8,200.00	7,900.99	36.04	28.20	-8.41	400.93	-112.37	2,372.10	2,338.96	33.14	71.586	
10,450.00	10,260.04	8,200.00	7,900.99	36.17	28.20	-8.20	400.93	-112.37	2,385.94	2,355.88	30.07	79.355	
10,476.42	10,267.46	8,200.00	7,900.99	36.24	28.20	-8.11	400.93	-112.37	2,391.97	2,363.37	28.59	83.651	
10,500.00	10,273.29	8,200.00	7,900.99	36.30	28.20	-8.07	400.93	-112.37	2,396.77	2,368.89	27.88	85.964	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 124H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,550.00	10,283.75	8,219.74	7,901.82	36.43	28.27	-7.98	420.65	-112.20	2,405.41	2,378.83	26.59	90.475	
10,600.00	10,291.65	8,234.03	7,902.00	36.57	28.32	-7.92	434.94	-112.07	2,412.45	2,386.89	25.55	94.407	
10,650.00	10,296.95	8,259.39	7,902.00	36.71	28.41	-7.87	460.30	-111.86	2,417.57	2,392.69	24.88	97.155	
10,700.00	10,299.64	8,309.32	7,902.00	36.86	28.60	-7.84	510.22	-111.43	2,420.24	2,395.57	24.67	98.102	
10,726.42	10,300.00	8,335.73	7,902.00	36.95	28.71	-7.83	536.63	-111.20	2,420.60	2,395.87	24.73	97.888	
10,800.00	10,300.00	8,409.31	7,902.00	37.19	29.02	-7.83	610.21	-110.57	2,420.60	2,395.41	25.20	96.075	
10,900.00	10,300.00	8,509.31	7,902.00	37.56	29.52	-7.83	710.21	-109.71	2,420.60	2,394.69	25.91	93.431	
11,000.00	10,300.00	8,609.31	7,902.00	37.99	30.07	-7.83	810.20	-108.85	2,420.60	2,393.90	26.70	90.665	
11,100.00	10,300.00	8,709.31	7,902.00	38.47	30.69	-7.83	910.20	-107.99	2,420.60	2,393.04	27.56	87.834	
11,200.00	10,300.00	8,809.31	7,902.00	38.99	31.36	-7.83	1,010.20	-107.13	2,420.60	2,392.12	28.48	84.984	
11,300.00	10,300.00	8,909.31	7,902.00	39.56	32.08	-7.83	1,110.19	-106.27	2,420.60	2,391.14	29.46	82.152	
11,400.00	10,300.00	9,009.31	7,902.00	40.18	32.85	-7.83	1,210.19	-105.41	2,420.60	2,390.10	30.50	79.369	
11,500.00	10,300.00	9,109.31	7,902.00	40.83	33.66	-7.83	1,310.18	-104.55	2,420.60	2,389.02	31.58	76.656	
11,600.00	10,300.00	9,209.31	7,902.00	41.53	34.52	-7.83	1,410.18	-103.69	2,420.60	2,387.90	32.70	74.027	
11,700.00	10,300.00	9,309.31	7,902.00	42.27	35.41	-7.83	1,510.18	-102.83	2,420.60	2,386.74	33.86	71.492	
11,800.00	10,300.00	9,409.31	7,902.00	43.04	36.35	-7.83	1,610.17	-101.97	2,420.60	2,385.55	35.05	69.059	
11,900.00	10,300.00	9,509.31	7,902.00	43.84	37.31	-7.83	1,710.17	-101.11	2,420.60	2,384.33	36.28	66.729	
12,000.00	10,300.00	9,609.31	7,902.00	44.68	38.31	-7.83	1,810.17	-100.25	2,420.60	2,383.07	37.53	64.503	
12,100.00	10,300.00	9,709.31	7,902.00	45.55	39.33	-7.83	1,910.16	-99.39	2,420.60	2,381.80	38.80	62.381	
12,200.00	10,300.00	9,809.31	7,902.00	46.45	40.38	-7.83	2,010.16	-98.53	2,420.60	2,380.50	40.10	60.360	
12,300.00	10,300.00	9,909.31	7,902.00	47.38	41.46	-7.83	2,110.16	-97.67	2,420.60	2,379.18	41.42	58.436	
12,400.00	10,300.00	10,009.31	7,902.00	48.33	42.55	-7.83	2,210.15	-96.81	2,420.60	2,377.84	42.76	56.606	
12,500.00	10,300.00	10,109.31	7,902.00	49.31	43.67	-7.83	2,310.15	-95.95	2,420.60	2,376.48	44.12	54.866	
12,600.00	10,300.00	10,209.31	7,902.00	50.31	44.81	-7.84	2,410.14	-95.09	2,420.60	2,375.11	45.49	53.212	
12,700.00	10,300.00	10,309.31	7,902.00	51.33	45.96	-7.84	2,510.14	-94.24	2,420.60	2,373.72	46.88	51.638	
12,800.00	10,300.00	10,409.31	7,902.00	52.37	47.13	-7.84	2,610.14	-93.38	2,420.60	2,372.32	48.28	50.142	
12,900.00	10,300.00	10,509.31	7,902.00	53.43	48.32	-7.84	2,710.13	-92.52	2,420.60	2,370.91	49.69	48.717	
13,000.00	10,300.00	10,609.31	7,902.00	54.51	49.52	-7.84	2,810.13	-91.66	2,420.60	2,369.49	51.11	47.361	
13,100.00	10,300.00	10,709.31	7,902.00	55.61	50.74	-7.84	2,910.13	-90.80	2,420.60	2,368.06	52.54	46.070	
13,200.00	10,300.00	10,809.31	7,902.00	56.72	51.96	-7.84	3,010.12	-89.94	2,420.60	2,366.62	53.98	44.839	
13,300.00	10,300.00	10,909.31	7,902.00	57.85	53.20	-7.84	3,110.12	-89.08	2,420.60	2,365.17	55.43	43.666	
13,400.00	10,300.00	11,009.31	7,902.00	58.99	54.45	-7.84	3,210.11	-88.22	2,420.60	2,363.71	56.89	42.546	
13,500.00	10,300.00	11,109.31	7,902.00	60.14	55.71	-7.84	3,310.11	-87.36	2,420.60	2,362.24	58.36	41.477	
13,600.00	10,300.00	11,209.31	7,902.00	61.31	56.97	-7.84	3,410.11	-86.50	2,420.60	2,360.77	59.83	40.456	
13,700.00	10,300.00	11,309.31	7,902.00	62.49	58.25	-7.84	3,510.10	-85.64	2,420.60	2,359.29	61.31	39.480	
13,800.00	10,300.00	11,409.31	7,902.00	63.68	59.53	-7.84	3,610.10	-84.78	2,420.60	2,357.80	62.80	38.545	
13,900.00	10,300.00	11,509.31	7,902.00	64.88	60.83	-7.84	3,710.10	-83.92	2,420.60	2,356.31	64.29	37.651	
14,000.00	10,300.00	11,609.31	7,902.00	66.09	62.12	-7.84	3,810.09	-83.06	2,420.60	2,354.81	65.79	36.795	
14,100.00	10,300.00	11,709.31	7,902.00	67.31	63.43	-7.84	3,910.09	-82.20	2,420.60	2,353.31	67.29	35.974	
14,200.00	10,300.00	11,809.31	7,902.00	68.54	64.74	-7.84	4,010.09	-81.34	2,420.60	2,351.81	68.79	35.186	
14,300.00	10,300.00	11,909.31	7,902.00	69.78	66.06	-7.84	4,110.08	-80.48	2,420.60	2,350.30	70.30	34.430	
14,400.00	10,300.00	12,009.31	7,902.00	71.03	67.38	-7.84	4,210.08	-79.62	2,420.60	2,348.78	71.82	33.705	
14,500.00	10,300.00	12,109.31	7,902.00	72.28	68.71	-7.84	4,310.07	-78.76	2,420.60	2,347.26	73.34	33.007	
14,600.00	10,300.00	12,209.31	7,902.00	73.54	70.04	-7.84	4,410.07	-77.90	2,420.60	2,345.74	74.86	32.336	
14,700.00	10,300.00	12,309.31	7,902.00	74.81	71.38	-7.84	4,510.07	-77.04	2,420.60	2,344.22	76.38	31.690	
14,800.00	10,300.00	12,409.31	7,902.00	76.09	72.73	-7.84	4,610.06	-76.18	2,420.60	2,342.69	77.91	31.069	
14,900.00	10,300.00	12,509.31	7,902.00	77.37	74.07	-7.84	4,710.06	-75.32	2,420.60	2,341.16	79.44	30.470	
15,000.00	10,300.00	12,609.31	7,902.00	78.65	75.42	-7.84	4,810.06	-74.46	2,420.60	2,339.62	80.98	29.893	
15,041.60	10,300.00	12,650.92	7,902.00	79.19	75.99	-7.84	4,851.66	-74.11	2,420.60	2,338.98	81.61	29.659	
15,055.78	10,300.00	12,663.26	7,902.00	79.38	76.15	-7.84	4,864.00	-74.00	2,420.60	2,338.78	81.82	29.585	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	*OH*	**Database:**	*Compass 5000 GCR*
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 204H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-90.00	90.00				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-90.00	90.00	89.74	0.26	346.297	
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-90.00	90.00	89.02	0.98	92.134	
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-90.00	90.00	88.31	1.69	53.136	
400.00	400.00	400.00	400.00	1.21	1.21	-90.00	0.00	-90.00	90.00	87.59	2.41	37.333	
500.00	500.00	500.00	500.00	1.56	1.56	-90.00	0.00	-90.00	90.00	86.87	3.13	28.775	
600.00	600.00	600.00	600.00	1.92	1.92	-90.00	0.00	-90.00	90.00	86.16	3.84	23.409	
700.00	700.00	700.00	700.00	2.28	2.28	-90.00	0.00	-90.00	90.00	85.44	4.56	19.730	
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-90.00	90.00	84.72	5.28	17.050	
900.00	900.00	900.00	900.00	3.00	3.00	-90.00	0.00	-90.00	90.00	84.00	6.00	15.011	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.00	0.00	-90.00	90.00	83.29	6.71	13.408	CC, ES
1,100.00	1,099.99	1,097.98	1,097.97	3.70	3.69	147.07	-0.66	-91.07	92.19	84.80	7.39	12.467	
1,200.00	1,199.91	1,195.69	1,195.60	4.04	4.02	147.08	-2.62	-94.27	98.76	90.70	8.06	12.260	
1,266.67	1,266.45	1,260.53	1,260.33	4.26	4.24	147.10	-4.64	-97.57	105.56	97.06	8.50	12.422	
1,300.00	1,299.70	1,293.49	1,293.21	4.38	4.36	147.12	-5.84	-99.53	109.48	100.76	8.72	12.550	
1,400.00	1,399.46	1,392.79	1,392.27	4.72	4.70	147.18	-9.47	-105.43	121.26	111.86	9.40	12.896	
1,500.00	1,499.22	1,492.09	1,491.33	5.07	5.05	147.22	-13.09	-111.34	133.04	122.95	10.09	13.187	
1,600.00	1,598.97	1,591.40	1,590.39	5.43	5.40	147.26	-16.71	-117.24	144.82	134.04	10.78	13.434	
1,700.00	1,698.73	1,690.70	1,689.45	5.78	5.75	147.30	-20.33	-123.15	156.60	145.13	11.48	13.646	
1,800.00	1,798.48	1,790.01	1,788.51	6.14	6.10	147.32	-23.95	-129.05	168.38	156.21	12.18	13.830	
1,900.00	1,898.24	1,889.31	1,887.58	6.50	6.46	147.35	-27.58	-134.95	180.16	167.29	12.88	13.991	
2,000.00	1,998.00	1,988.61	1,986.64	6.86	6.82	147.37	-31.20	-140.86	191.94	178.36	13.58	14.132	
2,100.00	2,097.75	2,087.92	2,085.70	7.22	7.18	147.39	-34.82	-146.76	203.72	189.43	14.29	14.257	
2,200.00	2,197.51	2,187.22	2,184.76	7.58	7.54	147.41	-38.44	-152.67	215.50	200.51	15.00	14.369	
2,300.00	2,297.27	2,286.52	2,283.82	7.94	7.90	147.42	-42.06	-158.57	227.28	211.58	15.71	14.469	
2,400.00	2,397.02	2,385.83	2,382.88	8.31	8.26	147.44	-45.68	-164.48	239.07	222.64	16.42	14.559	
2,500.00	2,496.78	2,485.13	2,481.95	8.67	8.62	147.45	-49.31	-170.38	250.85	233.71	17.13	14.641	
2,600.00	2,596.54	2,584.44	2,581.01	9.04	8.98	147.46	-52.93	-176.29	262.63	244.78	17.85	14.715	
2,700.00	2,696.29	2,683.74	2,680.07	9.40	9.35	147.47	-56.55	-182.19	274.41	255.84	18.56	14.783	
2,750.00	2,746.17	2,733.39	2,729.60	9.59	9.53	147.48	-58.36	-185.14	280.30	261.38	18.92	14.815	
2,800.00	2,796.02	2,781.04	2,777.12	9.77	9.70	147.45	-60.17	-188.08	286.58	267.32	19.26	14.880	
2,900.00	2,895.56	2,873.75	2,869.46	10.14	10.05	147.39	-64.53	-195.19	302.24	282.32	19.92	15.170	
3,000.00	2,994.81	2,965.42	2,960.53	10.52	10.40	147.31	-69.99	-204.10	322.09	301.51	20.58	15.652	
3,016.68	3,011.33	2,980.59	2,975.57	10.59	10.45	147.30	-71.00	-205.75	325.80	305.12	20.69	15.750	
3,100.00	3,093.84	3,059.02	3,053.26	10.91	10.75	147.33	-76.62	-214.91	345.13	323.85	21.28	16.221	
3,200.00	3,192.87	3,156.24	3,149.54	11.30	11.13	147.34	-83.69	-226.44	368.51	346.51	22.00	16.752	
3,300.00	3,291.90	3,253.47	3,245.83	11.68	11.51	147.35	-90.76	-237.97	391.89	369.17	22.72	17.248	
3,400.00	3,390.92	3,350.70	3,342.11	12.07	11.89	147.36	-97.83	-249.50	415.26	391.82	23.44	17.712	
3,500.00	3,489.95	3,447.93	3,438.39	12.47	12.27	147.37	-104.90	-261.03	438.64	414.47	24.17	18.148	
3,562.58	3,551.92	3,508.77	3,498.64	12.71	12.51	147.38	-109.33	-268.25	453.27	428.64	24.63	18.407	
3,600.00	3,589.00	3,545.20	3,534.71	12.86	12.65	147.44	-111.98	-272.57	461.87	436.95	24.92	18.534	
3,700.00	3,688.32	3,643.67	3,632.23	13.24	13.04	147.47	-119.13	-284.24	483.36	457.66	25.70	18.805	
3,800.00	3,787.91	3,754.08	3,741.80	13.62	13.46	147.40	-126.22	-295.80	501.34	474.82	26.52	18.907	
3,900.00	3,887.70	3,865.79	3,853.01	13.99	13.89	147.32	-131.71	-304.74	514.70	487.39	27.32	18.843	
4,000.00	3,987.62	3,978.41	3,965.39	14.35	14.30	147.22	-135.51	-310.94	523.41	495.31	28.10	18.627	
4,095.92	4,083.53	4,086.95	4,073.86	14.68	14.69	-89.95	-137.54	-314.25	527.34	498.51	28.82	18.295	
4,100.00	4,087.61	4,091.58	4,078.49	14.69	14.71	-89.96	-137.59	-314.33	527.41	498.55	28.85	18.278	
4,200.00	4,187.61	4,200.71	4,187.61	15.02	15.08	-90.00	-138.00	-315.00	528.00	498.43	29.57	17.859	
4,300.00	4,287.61	4,300.71	4,287.61	15.36	15.41	-90.00	-138.00	-315.00	528.00	497.76	30.24	17.461	
4,400.00	4,387.61	4,400.71	4,387.61	15.69	15.74	-90.00	-138.00	-315.00	528.00	497.09	30.91	17.079	
4,500.00	4,487.61	4,500.71	4,487.61	16.03	16.08	-90.00	-138.00	-315.00	528.00	496.41	31.59	16.713	
4,600.00	4,587.61	4,600.71	4,587.61	16.36	16.41	-90.00	-138.00	-315.00	528.00	495.73	32.27	16.362	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	***Database:***	*Compass 5000 GCR*
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 204H - OH - Preliminary Plan 1 — Offset Site Error: 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,700.00	4,687.61	4,700.71	4,687.61	16.70	16.75	-90.00	-138.00	-315.00	528.00	495.05	32.95	16.024	
4,800.00	4,787.61	4,800.71	4,787.61	17.04	17.09	-90.00	-138.00	-315.00	528.00	494.37	33.63	15.699	
4,900.00	4,887.61	4,900.71	4,887.61	17.38	17.43	-90.00	-138.00	-315.00	528.00	493.68	34.32	15.386	
5,000.00	4,987.61	5,000.71	4,987.61	17.72	17.76	-90.00	-138.00	-315.00	528.00	493.00	35.00	15.085	
5,100.00	5,087.61	5,100.71	5,087.61	18.06	18.10	-90.00	-138.00	-315.00	528.00	492.31	35.69	14.795	
5,200.00	5,187.61	5,200.71	5,187.61	18.40	18.44	-90.00	-138.00	-315.00	528.00	491.62	36.38	14.515	
5,300.00	5,287.61	5,300.71	5,287.61	18.74	18.78	-90.00	-138.00	-315.00	528.00	490.94	37.06	14.246	
5,400.00	5,387.61	5,400.71	5,387.61	19.09	19.13	-90.00	-138.00	-315.00	528.00	490.25	37.75	13.986	
5,500.00	5,487.61	5,500.71	5,487.61	19.43	19.47	-90.00	-138.00	-315.00	528.00	489.56	38.44	13.734	
5,600.00	5,587.61	5,600.71	5,587.61	19.78	19.81	-90.00	-138.00	-315.00	528.00	488.86	39.14	13.492	
5,700.00	5,687.61	5,700.71	5,687.61	20.12	20.15	-90.00	-138.00	-315.00	528.00	488.17	39.83	13.257	
5,800.00	5,787.61	5,800.71	5,787.61	20.46	20.50	-90.00	-138.00	-315.00	528.00	487.48	40.52	13.030	
5,900.00	5,887.61	5,900.71	5,887.61	20.81	20.84	-90.00	-138.00	-315.00	528.00	486.79	41.21	12.811	
6,000.00	5,987.61	6,000.71	5,987.61	21.16	21.19	-90.00	-138.00	-315.00	528.00	486.09	41.91	12.599	
6,100.00	6,087.61	6,100.71	6,087.61	21.50	21.53	-90.00	-138.00	-315.00	528.00	485.39	42.61	12.393	
6,200.00	6,187.61	6,200.71	6,187.61	21.85	21.88	-90.00	-138.00	-315.00	528.00	484.70	43.30	12.194	
6,300.00	6,287.61	6,300.71	6,287.61	22.20	22.23	-90.00	-138.00	-315.00	528.00	484.00	44.00	12.000	
6,400.00	6,387.61	6,400.71	6,387.61	22.54	22.57	-90.00	-138.00	-315.00	528.00	483.30	44.70	11.813	
6,500.00	6,487.61	6,500.71	6,487.61	22.89	22.92	-90.00	-138.00	-315.00	528.00	482.61	45.39	11.631	
6,600.00	6,587.61	6,600.71	6,587.61	23.24	23.27	-90.00	-138.00	-315.00	528.00	481.91	46.09	11.455	
6,700.00	6,687.61	6,700.71	6,687.61	23.59	23.61	-90.00	-138.00	-315.00	528.00	481.21	46.79	11.284	
6,800.00	6,787.61	6,800.71	6,787.61	23.94	23.96	-90.00	-138.00	-315.00	528.00	480.51	47.49	11.118	
6,900.00	6,887.61	6,900.71	6,887.61	24.28	24.31	-90.00	-138.00	-315.00	528.00	479.81	48.19	10.956	
7,000.00	6,987.61	7,000.71	6,987.61	24.63	24.66	-90.00	-138.00	-315.00	528.00	479.11	48.89	10.799	
7,100.00	7,087.61	7,100.71	7,087.61	24.98	25.01	-90.00	-138.00	-315.00	528.00	478.41	49.59	10.646	
7,200.00	7,187.61	7,200.71	7,187.61	25.33	25.36	-90.00	-138.00	-315.00	528.00	477.70	50.30	10.498	
7,300.00	7,287.61	7,300.71	7,287.61	25.68	25.71	-90.00	-138.00	-315.00	528.00	477.00	51.00	10.353	
7,400.00	7,387.61	7,400.71	7,387.61	26.03	26.05	-90.00	-138.00	-315.00	528.00	476.30	51.70	10.213	
7,500.00	7,487.61	7,500.71	7,487.61	26.38	26.40	-90.00	-138.00	-315.00	528.00	475.60	52.40	10.076	
7,600.00	7,587.61	7,600.71	7,587.61	26.73	26.75	-90.00	-138.00	-315.00	528.00	474.89	53.11	9.942	
7,700.00	7,687.61	7,700.71	7,687.61	27.09	27.10	-90.00	-138.00	-315.00	528.00	474.19	53.81	9.812	
7,800.00	7,787.61	7,800.71	7,787.61	27.44	27.46	-90.00	-138.00	-315.00	528.00	473.49	54.51	9.686	
7,900.00	7,887.61	7,900.71	7,887.61	27.79	27.81	-90.00	-138.00	-315.00	528.00	472.78	55.22	9.562	
8,000.00	7,987.61	8,000.71	7,987.61	28.14	28.16	-90.00	-138.00	-315.00	528.00	472.08	55.92	9.441	
8,100.00	8,087.61	8,100.71	8,087.61	28.49	28.51	-90.00	-138.00	-315.00	528.00	471.37	56.63	9.324	
8,200.00	8,187.61	8,200.71	8,187.61	28.84	28.86	-90.00	-138.00	-315.00	528.00	470.67	57.33	9.209	
8,300.00	8,287.61	8,300.71	8,287.61	29.19	29.21	-90.00	-138.00	-315.00	528.00	469.96	58.04	9.097	
8,400.00	8,387.61	8,400.71	8,387.61	29.55	29.56	-90.00	-138.00	-315.00	528.00	469.26	58.74	8.988	
8,500.00	8,487.61	8,500.71	8,487.61	29.90	29.91	-90.00	-138.00	-315.00	528.00	468.55	59.45	8.881	
8,600.00	8,587.61	8,600.71	8,587.61	30.25	30.27	-90.00	-138.00	-315.00	528.00	467.84	60.16	8.777	
8,700.00	8,687.61	8,700.71	8,687.61	30.60	30.62	-90.00	-138.00	-315.00	528.00	467.14	60.86	8.675	
8,800.00	8,787.61	8,800.71	8,787.61	30.96	30.97	-90.00	-138.00	-315.00	528.00	466.43	61.57	8.576	
8,900.00	8,887.61	8,900.71	8,887.61	31.31	31.32	-90.00	-138.00	-315.00	528.00	465.72	62.28	8.478	
8,943.22	8,930.83	8,943.93	8,930.83	31.46	31.47	-90.00	-138.00	-315.00	528.00	465.42	62.58	8.437	
9,000.00	8,987.61	8,995.57	8,982.45	31.66	31.66	-89.88	-136.85	-315.18	528.20	465.24	62.97	8.389	
9,100.00	9,087.61	9,081.48	9,067.45	32.02	31.95	-88.61	-125.14	-316.97	530.51	466.90	63.61	8.340 SF	
9,200.00	9,187.61	9,162.17	9,144.85	32.37	32.21	-86.23	-102.81	-320.39	536.26	472.03	64.23	8.349	
9,300.00	9,287.61	9,235.30	9,211.63	32.72	32.43	-83.16	-73.47	-324.89	547.04	482.24	64.80	8.442	
9,400.00	9,387.61	9,300.00	9,267.15	33.08	32.60	-79.84	-40.69	-329.91	564.56	499.22	65.34	8.640	
9,500.00	9,487.61	9,350.00	9,307.28	33.43	32.72	-76.96	-11.24	-334.42	590.13	524.30	65.83	8.964	
9,600.00	9,587.61	9,400.00	9,344.67	33.78	32.82	-73.89	21.55	-339.44	624.24	557.92	66.32	9.413	
9,700.00	9,687.61	9,450.00	9,379.02	34.14	32.92	-70.69	57.44	-344.94	666.88	600.09	66.79	9.984	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 204H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,726.42	9,714.03	9,450.00	9,379.02	34.23	32.92	-70.69	57.44	-344.94	679.51	612.62	66.89	10.159	
9,750.00	9,737.60	9,464.16	9,388.16	34.31	32.94	-69.04	68.14	-346.58	691.04	624.05	66.99	10.315	
9,800.00	9,787.41	9,482.99	9,399.90	34.49	32.97	-65.32	82.69	-348.81	715.88	648.75	67.13	10.664	
9,850.00	9,836.66	9,500.00	9,410.08	34.66	33.01	-61.88	96.16	-350.87	740.84	673.72	67.12	11.038	
9,900.00	9,884.97	9,521.72	9,422.48	34.82	33.06	-58.48	113.78	-353.57	765.56	698.66	66.91	11.442	
9,950.00	9,931.98	9,550.00	9,437.60	34.98	33.14	-55.17	137.40	-357.19	789.89	723.45	66.44	11.889	
10,000.00	9,977.33	9,550.00	9,437.60	35.12	33.14	-53.00	137.40	-357.19	813.46	747.75	65.71	12.380	
10,050.00	10,020.68	9,581.76	9,453.15	35.26	33.23	-50.23	164.76	-361.38	835.82	771.15	64.66	12.926	
10,100.00	10,061.70	9,600.00	9,461.38	35.38	33.29	-48.08	180.86	-363.85	857.22	793.86	63.36	13.529	
10,150.00	10,100.07	9,622.68	9,470.89	35.49	33.35	-46.13	201.20	-366.97	877.31	815.50	61.81	14.194	
10,200.00	10,135.50	9,650.00	9,481.24	35.59	33.44	-44.40	226.20	-370.79	896.04	835.98	60.06	14.919	
10,250.00	10,167.72	9,664.08	9,486.11	35.69	33.48	-43.04	239.25	-372.79	913.11	854.92	58.19	15.691	
10,300.00	10,196.49	9,684.91	9,492.70	35.80	33.55	-41.83	258.78	-375.79	928.61	872.34	56.27	16.504	
10,350.00	10,221.59	9,705.80	9,498.60	35.92	33.61	-40.83	278.60	-378.82	942.38	888.01	54.37	17.332	
10,400.00	10,242.83	9,731.95	9,505.11	36.04	33.69	-40.04	303.63	-382.66	954.26	901.64	52.62	18.135	
10,450.00	10,260.04	9,750.00	9,509.20	36.17	33.75	-39.44	321.01	-385.32	964.06	912.98	51.08	18.874	
10,476.42	10,267.46	9,773.62	9,514.04	36.24	33.83	-39.26	343.86	-388.82	968.24	917.77	50.47	19.184	
10,500.00	10,273.29	9,786.50	9,516.44	36.30	33.88	-39.20	356.36	-390.74	971.67	921.45	50.22	19.349	
10,550.00	10,283.75	9,813.80	9,520.97	36.43	33.97	-39.10	382.97	-394.81	978.30	928.51	49.79	19.649	
10,600.00	10,291.65	9,850.00	9,525.77	36.57	34.10	-39.12	418.44	-400.25	984.12	934.52	49.60	19.842	
10,650.00	10,296.95	9,868.37	9,527.69	36.71	34.17	-39.08	436.49	-403.01	988.92	939.47	49.45	20.000	
10,700.00	10,299.64	9,900.00	9,530.17	36.86	34.29	-39.18	467.66	-407.79	992.94	943.35	49.59	20.023	
10,726.42	10,300.00	9,900.00	9,530.17	36.95	34.29	-39.11	467.66	-407.79	994.77	945.19	49.58	20.065	
10,800.00	10,300.00	9,950.00	9,531.96	37.19	34.49	-39.54	517.05	-415.35	1,000.47	950.23	50.24	19.915	
10,900.00	10,300.00	10,085.09	9,532.00	37.56	35.08	-40.31	651.12	-431.69	1,008.97	957.38	51.58	19.560	
11,000.00	10,300.00	10,237.35	9,532.00	37.99	35.82	-40.66	803.18	-438.72	1,012.53	959.72	52.81	19.172	
11,100.00	10,300.00	10,347.21	9,532.00	38.47	36.41	-40.67	913.04	-437.99	1,012.62	958.92	53.70	18.855	
11,200.00	10,300.00	10,447.21	9,532.00	38.99	36.99	-40.67	1,013.03	-437.13	1,012.62	958.00	54.62	18.539	
11,300.00	10,300.00	10,547.21	9,532.00	39.56	37.61	-40.67	1,113.03	-436.27	1,012.62	957.01	55.61	18.208	
11,400.00	10,300.00	10,647.21	9,532.00	40.18	38.28	-40.67	1,213.03	-435.41	1,012.62	955.95	56.68	17.867	
11,500.00	10,300.00	10,747.21	9,532.00	40.83	38.99	-40.67	1,313.02	-434.55	1,012.62	954.82	57.80	17.518	
11,600.00	10,300.00	10,847.21	9,532.00	41.53	39.74	-40.67	1,413.02	-433.69	1,012.62	953.62	59.00	17.164	
11,700.00	10,300.00	10,947.21	9,532.00	42.27	40.53	-40.67	1,513.02	-432.83	1,012.62	952.37	60.25	16.807	
11,800.00	10,300.00	11,047.21	9,532.00	43.04	41.36	-40.67	1,613.01	-431.97	1,012.62	951.07	61.56	16.451	
11,900.00	10,300.00	11,147.21	9,532.00	43.84	42.22	-40.67	1,713.01	-431.11	1,012.62	949.71	62.91	16.095	
12,000.00	10,300.00	11,247.21	9,532.00	44.68	43.11	-40.67	1,813.00	-430.25	1,012.62	948.30	64.32	15.743	
12,100.00	10,300.00	11,347.21	9,532.00	45.55	44.03	-40.67	1,913.00	-429.39	1,012.62	946.84	65.78	15.395	
12,200.00	10,300.00	11,447.21	9,532.00	46.45	44.98	-40.67	2,013.00	-428.53	1,012.62	945.35	67.27	15.052	
12,300.00	10,300.00	11,547.21	9,532.00	47.38	45.96	-40.67	2,112.99	-427.67	1,012.62	943.81	68.81	14.716	
12,400.00	10,300.00	11,647.21	9,532.00	48.33	46.95	-40.67	2,212.99	-426.81	1,012.62	942.24	70.39	14.387	
12,500.00	10,300.00	11,747.21	9,532.00	49.31	47.98	-40.67	2,312.99	-425.95	1,012.62	940.63	72.00	14.065	
12,600.00	10,300.00	11,847.21	9,532.00	50.31	49.02	-40.67	2,412.98	-425.09	1,012.62	938.99	73.64	13.751	
12,700.00	10,300.00	11,947.21	9,532.00	51.33	50.09	-40.67	2,512.98	-424.23	1,012.62	937.31	75.31	13.446	
12,800.00	10,300.00	12,047.21	9,532.00	52.37	51.17	-40.67	2,612.97	-423.37	1,012.62	935.61	77.01	13.149	
12,900.00	10,300.00	12,147.21	9,532.00	53.43	52.27	-40.67	2,712.97	-422.51	1,012.62	933.88	78.74	12.860	
13,000.00	10,300.00	12,247.21	9,532.00	54.51	53.39	-40.67	2,812.97	-421.65	1,012.62	932.13	80.49	12.580	
13,100.00	10,300.00	12,347.21	9,532.00	55.61	54.53	-40.67	2,912.96	-420.79	1,012.62	930.35	82.27	12.309	
13,200.00	10,300.00	12,447.21	9,532.00	56.72	55.68	-40.67	3,012.96	-419.93	1,012.62	928.56	84.07	12.045	
13,300.00	10,300.00	12,547.21	9,532.00	57.85	56.84	-40.67	3,112.96	-419.07	1,012.62	926.74	85.89	11.790	
13,400.00	10,300.00	12,647.21	9,532.00	58.99	58.02	-40.67	3,212.95	-418.21	1,012.62	924.90	87.72	11.543	
13,500.00	10,300.00	12,747.21	9,532.00	60.14	59.20	-40.67	3,312.95	-417.35	1,012.62	923.04	89.58	11.304	
13,600.00	10,300.00	12,847.21	9,532.00	61.31	60.40	-40.67	3,412.95	-416.49	1,012.62	921.17	91.45	11.073	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 204H - OH - Preliminary Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-PHX+MWD+HDGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.00	10,300.00	12,947.21	9,532.00	62.49	61.61	-40.67	3,512.94	-415.63	1,012.63	919.28	93.34	10.848	
13,800.00	10,300.00	13,047.21	9,532.00	63.68	62.84	-40.67	3,612.94	-414.77	1,012.63	917.38	95.25	10.632	
13,900.00	10,300.00	13,147.21	9,532.00	64.88	64.07	-40.67	3,712.93	-413.91	1,012.63	915.46	97.17	10.422	
14,000.00	10,300.00	13,247.21	9,532.00	66.09	65.31	-40.67	3,812.93	-413.05	1,012.63	913.53	99.10	10.219	
14,100.00	10,300.00	13,347.21	9,532.00	67.31	66.55	-40.67	3,912.93	-412.19	1,012.63	911.59	101.04	10.022	
14,200.00	10,300.00	13,447.21	9,532.00	68.54	67.81	-40.67	4,012.92	-411.33	1,012.63	909.63	103.00	9.832	
14,300.00	10,300.00	13,547.21	9,532.00	69.78	69.08	-40.67	4,112.92	-410.47	1,012.63	907.66	104.96	9.647	
14,400.00	10,300.00	13,647.21	9,532.00	71.03	70.35	-40.67	4,212.92	-409.61	1,012.63	905.69	106.94	9.469	
14,500.00	10,300.00	13,747.21	9,532.00	72.28	71.63	-40.67	4,312.91	-408.75	1,012.63	903.70	108.93	9.296	
14,600.00	10,300.00	13,847.21	9,532.00	73.54	72.91	-40.67	4,412.91	-407.89	1,012.63	901.70	110.93	9.129	
14,700.00	10,300.00	13,947.21	9,532.00	74.81	74.20	-40.67	4,512.90	-407.03	1,012.63	899.70	112.93	8.967	
14,800.00	10,300.00	14,047.21	9,532.00	76.09	75.50	-40.67	4,612.90	-406.17	1,012.63	897.68	114.95	8.810	
14,900.00	10,300.00	14,147.21	9,532.00	77.37	76.80	-40.67	4,712.90	-405.31	1,012.63	895.66	116.97	8.657	
15,000.00	10,300.00	14,247.21	9,532.00	78.65	78.11	-40.67	4,812.89	-404.45	1,012.63	893.63	119.00	8.510	
15,030.31	10,300.00	14,277.52	9,532.00	79.05	78.51	-40.67	4,843.20	-404.19	1,012.63	893.01	119.62	8.466	
15,055.78	10,300.00	14,299.32	9,532.00	79.38	78.79	-40.67	4,865.00	-404.00	1,012.63	892.54	120.10	8.432	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 208H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-30.00	30.00				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-30.00	30.00	29.74	0.26	115.432	
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-30.00	30.00	29.02	0.98	30.711	
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-30.00	30.00	28.31	1.69	17.712	
400.00	400.00	400.00	400.00	1.21	1.21	-90.00	0.00	-30.00	30.00	27.59	2.41	12.444	
500.00	500.00	500.00	500.00	1.56	1.56	-90.00	0.00	-30.00	30.00	26.87	3.13	9.592	
600.00	600.00	600.00	600.00	1.92	1.92	-90.00	0.00	-30.00	30.00	26.16	3.84	7.803	
700.00	700.00	700.00	700.00	2.28	2.28	-90.00	0.00	-30.00	30.00	25.44	4.56	6.577	
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-30.00	30.00	24.72	5.28	5.683	
900.00	900.00	900.00	900.00	3.00	3.00	-90.00	0.00	-30.00	30.00	24.00	6.00	5.004	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.00	0.00	-30.00	30.00	23.29	6.71	4.469	CC
1,100.00	1,099.99	1,100.49	1,100.48	3.70	3.70	146.46	-1.03	-29.18	30.28	22.88	7.40	4.092	ES
1,200.00	1,199.91	1,200.97	1,200.88	4.04	4.03	144.71	-4.13	-26.71	31.14	23.08	8.06	3.861	
1,266.67	1,266.45	1,267.94	1,267.72	4.26	4.26	143.00	-7.35	-24.15	32.06	23.55	8.51	3.767	
1,300.00	1,299.70	1,301.26	1,300.96	4.38	4.37	142.09	-9.16	-22.70	32.60	23.87	8.74	3.732	
1,400.00	1,399.46	1,401.24	1,400.69	4.72	4.71	139.54	-14.61	-18.35	34.28	24.86	9.42	3.638	
1,500.00	1,499.22	1,501.21	1,500.42	5.07	5.06	137.24	-20.07	-14.00	36.02	25.91	10.12	3.561	
1,600.00	1,598.97	1,601.19	1,600.16	5.43	5.41	135.14	-25.52	-9.66	37.82	27.00	10.82	3.497	
1,700.00	1,698.73	1,701.16	1,699.89	5.78	5.76	133.25	-30.97	-5.31	39.66	28.14	11.52	3.442	
1,800.00	1,798.48	1,801.14	1,799.62	6.14	6.12	131.52	-36.42	-0.97	41.53	29.30	12.23	3.396	
1,900.00	1,898.24	1,901.11	1,899.35	6.50	6.48	129.94	-41.88	3.38	43.45	30.50	12.94	3.356	
2,000.00	1,998.00	2,001.09	1,999.08	6.86	6.83	128.50	-47.33	7.72	45.39	31.73	13.66	3.322	
2,100.00	2,097.75	2,101.06	2,098.81	7.22	7.19	127.17	-52.78	12.07	47.36	32.98	14.38	3.293	
2,200.00	2,197.51	2,201.04	2,198.54	7.58	7.56	125.95	-58.23	16.42	49.35	34.25	15.11	3.267	
2,300.00	2,297.27	2,301.01	2,298.28	7.94	7.92	124.83	-63.68	20.76	51.37	35.54	15.83	3.245	
2,400.00	2,397.02	2,400.99	2,398.01	8.31	8.28	123.79	-69.14	25.11	53.40	36.84	16.56	3.225	
2,500.00	2,496.78	2,500.96	2,497.74	8.67	8.65	122.83	-74.59	29.45	55.45	38.16	17.28	3.208	
2,600.00	2,596.54	2,600.94	2,597.47	9.04	9.01	121.94	-80.04	33.80	57.51	39.49	18.01	3.192	
2,700.00	2,696.29	2,700.91	2,697.20	9.40	9.38	121.11	-85.49	38.15	59.58	40.84	18.75	3.179	
2,750.00	2,746.17	2,750.90	2,747.07	9.59	9.56	120.71	-88.22	40.32	60.63	41.52	19.11	3.172	
2,800.00	2,796.02	2,800.88	2,796.93	9.77	9.74	120.58	-90.94	42.49	61.84	42.36	19.47	3.175	
2,900.00	2,895.56	2,900.81	2,896.62	10.14	10.11	121.80	-96.39	46.84	65.27	45.08	20.20	3.232	
3,000.00	2,994.81	3,000.63	2,996.19	10.52	10.47	124.67	-101.84	51.18	70.20	49.28	20.91	3.357	
3,016.68	3,011.33	3,017.26	3,012.78	10.59	10.53	125.27	-102.74	51.90	71.18	50.15	21.03	3.385	
3,100.00	3,093.84	3,100.34	3,095.65	10.91	10.84	128.22	-107.28	55.51	76.32	54.69	21.63	3.528	
3,200.00	3,192.87	3,200.04	3,195.12	11.30	11.21	131.26	-112.71	59.84	82.72	60.36	22.36	3.700	
3,300.00	3,291.90	3,299.75	3,294.58	11.68	11.57	133.86	-118.15	64.18	89.32	66.23	23.08	3.869	
3,400.00	3,390.92	3,399.45	3,394.04	12.07	11.94	136.10	-123.59	68.51	96.07	72.26	23.81	4.035	
3,500.00	3,489.95	3,499.16	3,493.51	12.47	12.31	138.04	-129.03	72.85	102.95	78.42	24.53	4.196	
3,562.58	3,551.92	3,561.11	3,555.31	12.71	12.53	139.18	-132.31	75.46	107.38	82.39	24.99	4.298	
3,600.00	3,589.00	3,597.86	3,592.01	12.86	12.67	139.95	-133.94	76.77	110.12	84.85	25.27	4.358	
3,700.00	3,688.32	3,695.97	3,690.03	13.24	13.02	142.02	-136.96	79.17	117.08	91.08	26.00	4.503	
3,800.00	3,787.91	3,793.91	3,787.96	13.62	13.36	144.09	-138.00	80.00	123.54	96.84	26.70	4.626	
3,900.00	3,887.70	3,893.64	3,887.70	13.99	13.70	145.81	-138.00	80.00	128.81	101.42	27.39	4.703	
4,000.00	3,987.62	3,993.57	3,987.62	14.35	14.03	146.77	-138.00	80.00	131.99	103.92	28.07	4.702	
4,095.92	4,083.53	4,089.47	4,083.53	14.68	14.35	-90.00	-138.00	80.00	133.00	104.29	28.71	4.632	
4,100.00	4,087.61	4,093.56	4,087.61	14.69	14.37	-90.00	-138.00	80.00	133.00	104.26	28.74	4.628	
4,200.00	4,187.61	4,193.56	4,187.61	15.02	14.71	-90.00	-138.00	80.00	133.00	103.59	29.41	4.522	
4,300.00	4,287.61	4,293.56	4,287.61	15.36	15.05	-90.00	-138.00	80.00	133.00	102.91	30.09	4.420	
4,400.00	4,387.61	4,393.56	4,387.61	15.69	15.39	-90.00	-138.00	80.00	133.00	102.23	30.77	4.322	
4,500.00	4,487.61	4,493.56	4,487.61	16.03	15.73	-90.00	-138.00	80.00	133.00	101.55	31.45	4.229	
4,600.00	4,587.61	4,593.56	4,587.61	16.36	16.07	-90.00	-138.00	80.00	133.00	100.87	32.13	4.139	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 208H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,700.00	4,687.61	4,693.56	4,687.61	16.70	16.41	-90.00	-138.00	80.00	133.00	100.18	32.82	4.053	
4,800.00	4,787.61	4,793.56	4,787.61	17.04	16.75	-90.00	-138.00	80.00	133.00	99.50	33.50	3.970	
4,900.00	4,887.61	4,893.56	4,887.61	17.38	17.10	-90.00	-138.00	80.00	133.00	98.81	34.19	3.890	
5,000.00	4,987.61	4,993.56	4,987.61	17.72	17.44	-90.00	-138.00	80.00	133.00	98.13	34.87	3.814	
5,100.00	5,087.61	5,093.56	5,087.61	18.06	17.78	-90.00	-138.00	80.00	133.00	97.44	35.56	3.740	
5,200.00	5,187.61	5,193.56	5,187.61	18.40	18.13	-90.00	-138.00	80.00	133.00	96.75	36.25	3.669	
5,300.00	5,287.61	5,293.56	5,287.61	18.74	18.48	-90.00	-138.00	80.00	133.00	96.06	36.94	3.600	
5,400.00	5,387.61	5,393.56	5,387.61	19.09	18.82	-90.00	-138.00	80.00	133.00	95.37	37.63	3.534	
5,500.00	5,487.61	5,493.56	5,487.61	19.43	19.17	-90.00	-138.00	80.00	133.00	94.67	38.33	3.470	
5,600.00	5,587.61	5,593.56	5,587.61	19.78	19.52	-90.00	-138.00	80.00	133.00	93.98	39.02	3.408	
5,700.00	5,687.61	5,693.56	5,687.61	20.12	19.86	-90.00	-138.00	80.00	133.00	93.28	39.72	3.349	
5,800.00	5,787.61	5,793.56	5,787.61	20.46	20.21	-90.00	-138.00	80.00	133.00	92.59	40.41	3.291	
5,900.00	5,887.61	5,893.56	5,887.61	20.81	20.56	-90.00	-138.00	80.00	133.00	91.89	41.11	3.236	
6,000.00	5,987.61	5,993.56	5,987.61	21.16	20.91	-90.00	-138.00	80.00	133.00	91.20	41.80	3.182	
6,100.00	6,087.61	6,093.56	6,087.61	21.50	21.26	-90.00	-138.00	80.00	133.00	90.50	42.50	3.129	
6,200.00	6,187.61	6,193.56	6,187.61	21.85	21.61	-90.00	-138.00	80.00	133.00	89.80	43.20	3.079	
6,300.00	6,287.61	6,293.56	6,287.61	22.20	21.96	-90.00	-138.00	80.00	133.00	89.10	43.90	3.030	
6,400.00	6,387.61	6,393.56	6,387.61	22.54	22.31	-90.00	-138.00	80.00	133.00	88.40	44.60	2.982	
6,500.00	6,487.61	6,493.56	6,487.61	22.89	22.66	-90.00	-138.00	80.00	133.00	87.70	45.30	2.936	
6,600.00	6,587.61	6,593.56	6,587.61	23.24	23.01	-90.00	-138.00	80.00	133.00	87.00	46.00	2.892	
6,700.00	6,687.61	6,693.56	6,687.61	23.59	23.36	-90.00	-138.00	80.00	133.00	86.30	46.70	2.848	
6,800.00	6,787.61	6,793.56	6,787.61	23.94	23.71	-90.00	-138.00	80.00	133.00	85.60	47.40	2.806	
6,900.00	6,887.61	6,893.56	6,887.61	24.28	24.06	-90.00	-138.00	80.00	133.00	84.90	48.10	2.765	
7,000.00	6,987.61	6,993.56	6,987.61	24.63	24.41	-90.00	-138.00	80.00	133.00	84.20	48.80	2.725	
7,100.00	7,087.61	7,093.56	7,087.61	24.98	24.76	-90.00	-138.00	80.00	133.00	83.50	49.50	2.687	
7,200.00	7,187.61	7,193.56	7,187.61	25.33	25.11	-90.00	-138.00	80.00	133.00	82.79	50.21	2.649	
7,300.00	7,287.61	7,293.56	7,287.61	25.68	25.46	-90.00	-138.00	80.00	133.00	82.09	50.91	2.612	
7,400.00	7,387.61	7,393.56	7,387.61	26.03	25.82	-90.00	-138.00	80.00	133.00	81.39	51.61	2.577	
7,500.00	7,487.61	7,493.56	7,487.61	26.38	26.17	-90.00	-138.00	80.00	133.00	80.68	52.32	2.542	
7,600.00	7,587.61	7,593.56	7,587.61	26.73	26.52	-90.00	-138.00	80.00	133.00	79.98	53.02	2.508	
7,700.00	7,687.61	7,693.56	7,687.61	27.09	26.87	-90.00	-138.00	80.00	133.00	79.27	53.73	2.475	
7,800.00	7,787.61	7,793.56	7,787.61	27.44	27.23	-90.00	-138.00	80.00	133.00	78.57	54.43	2.443	
7,900.00	7,887.61	7,893.56	7,887.61	27.79	27.58	-90.00	-138.00	80.00	133.00	77.86	55.14	2.412	
8,000.00	7,987.61	7,993.56	7,987.61	28.14	27.93	-90.00	-138.00	80.00	133.00	77.16	55.84	2.382	
8,100.00	8,087.61	8,093.56	8,087.61	28.49	28.29	-90.00	-138.00	80.00	133.00	76.45	56.55	2.352	
8,200.00	8,187.61	8,193.56	8,187.61	28.84	28.64	-90.00	-138.00	80.00	133.00	75.74	57.26	2.323	
8,300.00	8,287.61	8,293.56	8,287.61	29.19	28.99	-90.00	-138.00	80.00	133.00	75.04	57.96	2.295	
8,400.00	8,387.61	8,393.56	8,387.61	29.55	29.35	-90.00	-138.00	80.00	133.00	74.33	58.67	2.267	
8,500.00	8,487.61	8,493.56	8,487.61	29.90	29.70	-90.00	-138.00	80.00	133.00	73.62	59.38	2.240	
8,600.00	8,587.61	8,593.56	8,587.61	30.25	30.05	-90.00	-138.00	80.00	133.00	72.92	60.08	2.214	
8,700.00	8,687.61	8,693.56	8,687.61	30.60	30.41	-90.00	-138.00	80.00	133.00	72.21	60.79	2.188	
8,800.00	8,787.61	8,793.56	8,787.61	30.96	30.76	-90.00	-138.00	80.00	133.00	71.50	61.50	2.163	
8,900.00	8,887.61	8,893.56	8,887.61	31.31	31.12	-90.00	-138.00	80.00	133.00	70.79	62.21	2.138	
9,000.00	8,987.61	8,995.18	8,989.20	31.66	31.47	-89.31	-136.40	80.28	132.74	69.83	62.91	2.110	
9,100.00	9,087.61	9,096.24	9,088.78	32.02	31.82	-82.20	-120.20	83.07	131.15	67.57	63.58	2.063	
9,117.72	9,105.34	9,113.41	9,105.34	32.08	31.88	-80.22	-115.74	83.84	131.07	67.38	63.69	2.058 SF	
9,200.00	9,187.61	9,188.96	9,176.32	32.37	32.11	-69.12	-90.38	88.21	134.04	69.86	64.19	2.088	
9,300.00	9,287.61	9,270.23	9,248.17	32.72	32.34	-54.35	-53.11	94.63	150.91	86.13	64.78	2.330	
9,400.00	9,387.61	9,339.39	9,304.59	33.08	32.52	-41.93	-13.77	101.41	186.49	121.14	65.34	2.854	
9,500.00	9,487.61	9,400.00	9,349.77	33.43	32.67	-32.56	26.00	108.27	238.46	172.58	65.88	3.620	
9,600.00	9,587.61	9,450.00	9,383.67	33.78	32.80	-26.19	62.20	114.51	302.28	235.92	66.37	4.555	
9,700.00	9,687.61	9,486.16	9,406.12	34.14	32.89	-22.32	90.13	119.32	374.24	307.44	66.80	5.602	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 208H - OH - Preliminary Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-PHX+MWD+HDGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,726.42	9,714.03	9,500.00	9,414.23	34.23	32.93	-20.99	101.18	121.23	394.34	327.42	66.93	5.892	
9,750.00	9,737.60	9,500.00	9,414.23	34.31	32.93	-20.49	101.18	121.23	412.27	345.33	66.94	6.159	
9,800.00	9,787.41	9,522.30	9,426.73	34.49	32.99	-17.06	119.38	124.37	449.21	382.51	66.70	6.734	
9,850.00	9,836.66	9,550.00	9,441.24	34.66	33.07	-14.15	142.63	128.37	484.79	418.73	66.05	7.339	
9,900.00	9,884.97	9,550.00	9,441.24	34.82	33.07	-13.08	142.63	128.37	518.54	453.62	64.93	7.986	
9,950.00	9,931.98	9,579.45	9,455.39	34.98	33.14	-11.06	168.08	132.76	550.28	486.87	63.41	8.678	
10,000.00	9,977.33	9,600.00	9,464.47	35.12	33.20	-9.72	186.25	135.89	580.30	518.82	61.48	9.439	
10,050.00	10,020.68	9,619.09	9,472.31	35.26	33.25	-8.66	203.40	138.85	608.32	549.16	59.16	10.283	
10,100.00	10,061.70	9,650.00	9,483.76	35.38	33.33	-7.49	231.69	143.72	634.46	577.97	56.49	11.231	
10,150.00	10,100.07	9,650.00	9,483.76	35.49	33.33	-7.15	231.69	143.72	658.23	604.74	53.49	12.305	
10,200.00	10,135.50	9,680.08	9,493.40	35.59	33.42	-6.28	259.76	148.56	679.71	629.46	50.24	13.529	
10,250.00	10,167.72	9,701.97	9,499.46	35.69	33.47	-5.68	280.49	152.14	699.08	652.30	46.78	14.942	
10,300.00	10,196.49	9,726.98	9,505.62	35.80	33.54	-5.10	304.38	156.25	715.99	672.80	43.19	16.576	
10,350.00	10,221.59	9,750.00	9,510.72	35.92	33.61	-4.63	326.50	160.07	730.20	690.63	39.57	18.453	
10,400.00	10,242.83	9,781.01	9,516.74	36.04	33.70	-4.10	356.47	165.23	741.60	705.56	36.04	20.577	
10,450.00	10,260.04	9,800.00	9,519.94	36.17	33.75	-3.79	374.92	168.41	750.31	717.56	32.76	22.906	
10,476.42	10,267.46	9,822.76	9,523.27	36.24	33.82	-3.47	397.11	172.24	753.65	722.45	31.20	24.154	
10,500.00	10,273.29	9,835.69	9,524.93	36.30	33.86	-3.30	409.74	174.41	756.23	725.77	30.46	24.831	
10,550.00	10,283.75	9,863.08	9,527.87	36.43	33.94	-2.94	436.58	179.04	760.88	731.82	29.06	26.182	
10,600.00	10,291.65	9,900.00	9,530.59	36.57	34.06	-2.47	472.86	185.29	764.52	736.53	27.99	27.315	
10,650.00	10,296.95	9,917.81	9,531.39	36.71	34.12	-2.25	490.40	188.32	766.84	739.59	27.25	28.144	
10,700.00	10,299.64	9,951.97	9,532.00	36.86	34.23	-1.83	524.06	194.12	768.20	741.26	26.94	28.516	
10,726.42	10,300.00	9,965.60	9,532.00	36.95	34.28	-1.67	537.49	196.38	768.33	741.39	26.94	28.520	
10,800.00	10,300.00	10,037.83	9,532.00	37.19	34.54	-0.94	608.96	206.80	768.10	740.75	27.35	28.084	
10,900.00	10,300.00	10,137.00	9,532.00	37.56	34.93	-0.27	707.63	216.67	768.01	740.01	28.00	27.433	
10,977.75	10,300.00	10,214.60	9,532.00	37.89	35.27	-0.01	785.12	220.82	768.00	739.46	28.54	26.905	
11,000.00	10,300.00	10,236.85	9,532.00	37.99	35.38	0.02	807.36	221.43	768.00	739.29	28.70	26.755	
11,100.00	10,300.00	10,336.86	9,532.00	38.47	35.87	0.04	907.36	222.44	768.00	738.53	29.47	26.061	
11,200.00	10,300.00	10,436.86	9,532.00	38.99	36.41	0.03	1,007.35	223.29	768.00	737.71	30.29	25.353	
11,300.00	10,300.00	10,536.86	9,532.00	39.56	37.01	0.03	1,107.35	224.14	768.00	736.83	31.17	24.636	
11,400.00	10,300.00	10,636.86	9,532.00	40.18	37.64	0.03	1,207.35	224.99	768.00	735.89	32.11	23.920	
11,500.00	10,300.00	10,736.86	9,532.00	40.83	38.33	0.03	1,307.34	225.84	768.00	734.91	33.09	23.211	
11,600.00	10,300.00	10,836.86	9,532.00	41.53	39.05	0.03	1,407.34	226.68	768.00	733.89	34.11	22.513	
11,700.00	10,300.00	10,936.86	9,532.00	42.27	39.82	0.03	1,507.34	227.53	768.00	732.82	35.18	21.832	
11,800.00	10,300.00	11,036.86	9,532.00	43.04	40.62	0.03	1,607.33	228.38	768.00	731.72	36.28	21.169	
11,900.00	10,300.00	11,136.86	9,532.00	43.84	41.45	0.03	1,707.33	229.23	768.00	730.58	37.42	20.526	
12,000.00	10,300.00	11,236.86	9,532.00	44.68	42.32	0.03	1,807.33	230.08	768.00	729.42	38.58	19.906	
12,100.00	10,300.00	11,336.86	9,532.00	45.55	43.23	0.03	1,907.32	230.93	768.00	728.23	39.77	19.309	
12,200.00	10,300.00	11,436.86	9,532.00	46.45	44.16	0.03	2,007.32	231.77	768.00	727.01	40.99	18.735	
12,300.00	10,300.00	11,536.86	9,532.00	47.38	45.12	0.02	2,107.31	232.62	768.00	725.77	42.23	18.184	
12,400.00	10,300.00	11,636.86	9,532.00	48.33	46.10	0.02	2,207.31	233.47	768.00	724.50	43.50	17.657	
12,500.00	10,300.00	11,736.86	9,532.00	49.31	47.11	0.02	2,307.31	234.32	768.00	723.22	44.78	17.151	
12,600.00	10,300.00	11,836.86	9,532.00	50.31	48.14	0.02	2,407.30	235.17	768.00	721.92	46.08	16.667	
12,700.00	10,300.00	11,936.86	9,532.00	51.33	49.19	0.02	2,507.30	236.02	768.00	720.61	47.39	16.204	
12,800.00	10,300.00	12,036.86	9,532.00	52.37	50.27	0.02	2,607.30	236.86	768.00	719.27	48.73	15.762	
12,900.00	10,300.00	12,136.86	9,532.00	53.43	51.36	0.02	2,707.29	237.71	768.00	717.93	50.07	15.338	
13,000.00	10,300.00	12,236.86	9,532.00	54.51	52.47	0.02	2,807.29	238.56	768.00	716.57	51.43	14.934	
13,100.00	10,300.00	12,336.86	9,532.00	55.61	53.59	0.02	2,907.29	239.41	768.00	715.20	52.80	14.546	
13,200.00	10,300.00	12,436.86	9,532.00	56.72	54.73	0.02	3,007.28	240.26	768.00	713.82	54.18	14.176	
13,300.00	10,300.00	12,536.86	9,532.00	57.85	55.89	0.02	3,107.28	241.11	768.00	712.43	55.57	13.821	
13,400.00	10,300.00	12,636.86	9,532.00	58.99	57.06	0.01	3,207.27	241.95	768.00	711.03	56.97	13.482	
13,500.00	10,300.00	12,736.86	9,532.00	60.14	58.24	0.01	3,307.27	242.80	768.00	709.63	58.37	13.156	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 208H - OH - Preliminary Plan 1 — Offset Site Error: 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,600.00	10,300.00	12,836.86	9,532.00	61.31	59.43	0.01	3,407.27	243.65	768.00	708.21	59.79	12.845	
13,700.00	10,300.00	12,936.86	9,532.00	62.49	60.64	0.01	3,507.26	244.50	768.00	706.79	61.21	12.546	
13,724.25	10,300.00	12,961.11	9,532.00	62.78	60.93	0.01	3,531.52	244.70	768.00	706.44	61.56	12.475	
13,800.00	10,300.00	13,036.86	9,532.00	63.68	61.85	0.01	3,607.26	245.35	768.00	705.36	62.64	12.260	
13,900.00	10,300.00	13,136.86	9,532.00	64.88	63.08	0.01	3,707.26	246.20	768.00	703.92	64.08	11.985	
14,000.00	10,300.00	13,236.86	9,532.00	66.09	64.31	0.01	3,807.25	247.04	768.00	702.48	65.52	11.721	
14,100.00	10,300.00	13,336.86	9,532.00	67.31	65.56	0.01	3,907.25	247.89	768.00	701.03	66.97	11.467	
14,200.00	10,300.00	13,436.86	9,532.00	68.54	66.81	0.01	4,007.25	248.74	768.00	699.57	68.43	11.224	
14,300.00	10,300.00	13,536.86	9,532.00	69.78	68.07	0.01	4,107.24	249.59	768.00	698.11	69.89	10.989	
14,400.00	10,300.00	13,636.86	9,532.00	71.03	69.34	0.01	4,207.24	250.44	768.00	696.65	71.35	10.764	
14,500.00	10,300.00	13,736.86	9,532.00	72.28	70.61	0.00	4,307.24	251.29	768.00	695.18	72.82	10.547	
14,600.00	10,300.00	13,836.86	9,532.00	73.54	71.89	0.00	4,407.23	252.13	768.00	693.71	74.29	10.338	
14,700.00	10,300.00	13,936.86	9,532.00	74.81	73.18	0.00	4,507.23	252.98	768.00	692.23	75.77	10.136	
14,800.00	10,300.00	14,036.86	9,532.00	76.09	74.48	0.00	4,607.22	253.83	768.00	690.75	77.25	9.942	
14,900.00	10,300.00	14,136.86	9,532.00	77.37	75.78	0.00	4,707.22	254.68	768.00	689.27	78.73	9.755	
15,000.00	10,300.00	14,236.86	9,532.00	78.65	77.08	0.00	4,807.22	255.53	768.00	687.78	80.22	9.574	
15,055.78	10,300.00	14,292.64	9,532.00	79.38	77.81	0.00	4,863.00	256.00	768.00	686.95	81.05	9.476	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 224H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	1.00	0.00	0.00	-90.00	0.00	-120.00	120.00				
100.00	100.00	99.00	100.00	0.13	0.13	-90.00	0.00	-120.00	120.00	119.74	0.26	464.050	
200.00	200.00	199.00	200.00	0.49	0.48	-90.00	0.00	-120.00	120.00	119.03	0.97	123.298	
300.00	300.00	299.00	300.00	0.85	0.84	-90.00	0.00	-120.00	120.00	118.31	1.69	70.998	
400.00	400.00	399.00	400.00	1.21	1.20	-90.00	0.00	-120.00	120.00	117.59	2.41	49.852	
500.00	500.00	499.00	500.00	1.56	1.56	-90.00	0.00	-120.00	120.00	116.88	3.12	38.411	
600.00	600.00	599.00	600.00	1.92	1.92	-90.00	0.00	-120.00	120.00	116.16	3.84	31.242	
700.00	700.00	699.00	700.00	2.28	2.28	-90.00	0.00	-120.00	120.00	115.44	4.56	26.328	
800.00	800.00	799.00	800.00	2.64	2.64	-90.00	0.00	-120.00	120.00	114.73	5.27	22.749	
900.00	900.00	899.00	900.00	3.00	2.99	-90.00	0.00	-120.00	120.00	114.01	5.99	20.027	
1,000.00	1,000.00	999.00	1,000.00	3.36	3.35	-90.00	0.00	-120.00	120.00	113.29	6.71	17.887	CC, ES
1,100.00	1,099.99	1,096.17	1,097.16	3.70	3.69	147.15	-0.47	-121.12	122.25	114.86	7.39	16.543	
1,200.00	1,199.91	1,193.00	1,193.92	4.04	4.02	147.37	-1.90	-124.49	129.03	120.98	8.05	16.028	
1,266.67	1,266.45	1,257.25	1,258.06	4.26	4.24	147.58	-3.37	-127.98	136.06	127.57	8.49	16.023	
1,300.00	1,299.70	1,289.26	1,289.99	4.38	4.35	147.70	-4.26	-130.09	140.20	131.49	8.71	16.089	
1,400.00	1,399.46	1,388.04	1,388.46	4.72	4.69	147.91	-7.26	-137.21	153.25	143.86	9.39	16.314	
1,500.00	1,499.22	1,487.19	1,487.30	5.07	5.04	148.10	-10.29	-144.38	166.32	156.24	10.08	16.500	
1,600.00	1,598.97	1,586.33	1,586.14	5.43	5.39	148.25	-13.31	-151.55	179.38	168.61	10.77	16.655	
1,700.00	1,698.73	1,685.47	1,684.97	5.78	5.75	148.39	-16.34	-158.71	192.45	180.99	11.47	16.785	
1,800.00	1,798.48	1,784.61	1,783.81	6.14	6.10	148.51	-19.36	-165.88	205.52	193.36	12.16	16.896	
1,900.00	1,898.24	1,883.75	1,882.64	6.50	6.46	148.61	-22.39	-173.05	218.59	205.73	12.87	16.990	
2,000.00	1,998.00	1,982.89	1,981.48	6.86	6.82	148.70	-25.41	-180.21	231.66	218.09	13.57	17.072	
2,100.00	2,097.75	2,082.03	2,080.32	7.22	7.18	148.78	-28.43	-187.38	244.73	230.46	14.28	17.143	
2,200.00	2,197.51	2,181.18	2,179.15	7.58	7.54	148.86	-31.46	-194.55	257.81	242.82	14.98	17.205	
2,300.00	2,297.27	2,280.32	2,277.99	7.94	7.91	148.92	-34.48	-201.71	270.88	255.18	15.69	17.260	
2,400.00	2,397.02	2,379.46	2,376.82	8.31	8.27	148.98	-37.51	-208.88	283.95	267.55	16.40	17.309	
2,500.00	2,496.78	2,478.60	2,475.66	8.67	8.64	149.04	-40.53	-216.04	297.02	279.91	17.12	17.353	
2,600.00	2,596.54	2,577.74	2,574.49	9.04	9.00	149.09	-43.56	-223.21	310.10	292.27	17.83	17.392	
2,700.00	2,696.29	2,676.88	2,673.33	9.40	9.37	149.14	-46.58	-230.38	323.17	304.63	18.54	17.427	
2,750.00	2,746.17	2,726.45	2,722.75	9.59	9.55	149.16	-48.09	-233.96	329.71	310.81	18.90	17.443	
2,800.00	2,796.02	2,775.99	2,772.13	9.77	9.73	149.16	-49.60	-237.54	336.52	317.28	19.25	17.486	
2,900.00	2,895.56	2,867.76	2,863.53	10.14	10.08	149.21	-52.76	-245.03	352.74	332.84	19.90	17.723	
3,000.00	2,994.81	2,957.88	2,953.09	10.52	10.42	149.25	-56.70	-254.35	373.27	352.72	20.55	18.167	
3,016.68	3,011.33	2,972.79	2,967.88	10.59	10.47	149.26	-57.43	-256.08	377.11	356.46	20.65	18.260	
3,100.00	3,093.84	3,046.86	3,041.24	10.91	10.76	149.39	-61.38	-265.45	397.30	376.08	21.23	18.718	
3,200.00	3,192.87	3,134.88	3,128.15	11.30	11.11	149.41	-66.80	-278.30	423.39	401.47	21.91	19.320	
3,300.00	3,291.90	3,229.54	3,221.38	11.68	11.49	149.36	-73.18	-293.41	450.78	428.15	22.63	19.923	
3,400.00	3,390.92	3,325.71	3,316.09	12.07	11.88	149.30	-79.67	-308.80	478.21	454.86	23.34	20.485	
3,500.00	3,489.95	3,421.87	3,410.79	12.47	12.27	149.26	-86.17	-324.18	505.63	481.57	24.06	21.012	
3,562.58	3,551.92	3,482.05	3,470.05	12.71	12.51	149.23	-90.23	-333.81	522.79	498.28	24.52	21.325	
3,600.00	3,589.00	3,518.08	3,505.53	12.86	12.66	149.28	-92.66	-339.57	532.91	508.10	24.81	21.480	
3,700.00	3,688.32	3,614.75	3,600.74	13.24	13.05	149.32	-99.19	-355.04	558.44	532.85	25.59	21.823	
3,800.00	3,787.91	3,711.94	3,696.45	13.62	13.45	149.22	-105.75	-370.58	581.79	555.43	26.36	22.071	
3,900.00	3,887.70	3,809.59	3,792.62	13.99	13.86	148.99	-112.34	-386.21	602.97	575.86	27.12	22.234	
4,000.00	3,987.62	3,916.71	3,898.20	14.35	14.30	148.62	-119.39	-402.90	621.61	593.72	27.90	22.282	
4,095.92	4,083.53	4,028.30	4,008.63	14.68	14.75	-88.87	-125.61	-417.64	635.19	606.54	28.65	22.169	
4,100.00	4,087.61	4,033.07	4,013.36	14.69	14.76	-88.90	-125.85	-418.20	635.67	606.99	28.68	22.162	
4,200.00	4,187.61	4,150.49	4,130.03	15.02	15.22	-89.37	-130.98	-430.36	645.97	616.52	29.45	21.935	
4,300.00	4,287.61	4,268.62	4,247.76	15.36	15.66	-89.71	-134.73	-439.26	653.48	623.27	30.21	21.629	
4,400.00	4,387.61	4,387.24	4,366.22	15.69	16.09	-89.92	-137.07	-444.81	658.16	627.18	30.98	21.247	
4,500.00	4,487.61	4,506.12	4,485.07	16.03	16.51	-90.00	-137.99	-446.97	659.97	628.24	31.74	20.796	
4,600.00	4,587.61	4,608.66	4,587.61	16.36	16.84	-90.00	-138.00	-447.00	660.00	627.58	32.42	20.358	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 224H - OH - Preliminary Plan 1 — Offset Site Error: 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,700.00	4,687.61	4,708.66	4,687.61	16.70	17.17	-90.00	-138.00	-447.00	660.00	626.90	33.10	19.942	
4,800.00	4,787.61	4,808.66	4,787.61	17.04	17.50	-90.00	-138.00	-447.00	660.00	626.23	33.77	19.541	
4,900.00	4,887.61	4,908.66	4,887.61	17.38	17.83	-90.00	-138.00	-447.00	660.00	625.55	34.45	19.156	
5,000.00	4,987.61	5,008.66	4,987.61	17.72	18.16	-90.00	-138.00	-447.00	660.00	624.86	35.14	18.784	
5,100.00	5,087.61	5,108.66	5,087.61	18.06	18.50	-90.00	-138.00	-447.00	660.00	624.18	35.82	18.426	
5,200.00	5,187.61	5,208.66	5,187.61	18.40	18.83	-90.00	-138.00	-447.00	660.00	623.50	36.50	18.081	
5,300.00	5,287.61	5,308.66	5,287.61	18.74	19.16	-90.00	-138.00	-447.00	660.00	622.81	37.19	17.748	
5,400.00	5,387.61	5,408.66	5,387.61	19.09	19.50	-90.00	-138.00	-447.00	660.00	622.13	37.87	17.426	
5,500.00	5,487.61	5,508.66	5,487.61	19.43	19.84	-90.00	-138.00	-447.00	660.00	621.44	38.56	17.116	
5,600.00	5,587.61	5,608.66	5,587.61	19.78	20.17	-90.00	-138.00	-447.00	660.00	620.75	39.25	16.815	
5,700.00	5,687.61	5,708.66	5,687.61	20.12	20.51	-90.00	-138.00	-447.00	660.00	620.06	39.94	16.525	
5,800.00	5,787.61	5,808.66	5,787.61	20.46	20.85	-90.00	-138.00	-447.00	660.00	619.37	40.63	16.244	
5,900.00	5,887.61	5,908.66	5,887.61	20.81	21.19	-90.00	-138.00	-447.00	660.00	618.68	41.32	15.972	
6,000.00	5,987.61	6,008.66	5,987.61	21.16	21.53	-90.00	-138.00	-447.00	660.00	617.99	42.01	15.709	
6,100.00	6,087.61	6,108.66	6,087.61	21.50	21.87	-90.00	-138.00	-447.00	660.00	617.29	42.71	15.454	
6,200.00	6,187.61	6,208.66	6,187.61	21.85	22.21	-90.00	-138.00	-447.00	660.00	616.60	43.40	15.207	
6,300.00	6,287.61	6,308.66	6,287.61	22.20	22.55	-90.00	-138.00	-447.00	660.00	615.91	44.09	14.968	
6,400.00	6,387.61	6,408.66	6,387.61	22.54	22.89	-90.00	-138.00	-447.00	660.00	615.21	44.79	14.735	
6,500.00	6,487.61	6,508.66	6,487.61	22.89	23.23	-90.00	-138.00	-447.00	660.00	614.51	45.49	14.510	
6,600.00	6,587.61	6,608.66	6,587.61	23.24	23.58	-90.00	-138.00	-447.00	660.00	613.82	46.18	14.291	
6,700.00	6,687.61	6,708.66	6,687.61	23.59	23.92	-90.00	-138.00	-447.00	660.00	613.12	46.88	14.078	
6,800.00	6,787.61	6,808.66	6,787.61	23.94	24.26	-90.00	-138.00	-447.00	660.00	612.42	47.58	13.872	
6,900.00	6,887.61	6,908.66	6,887.61	24.28	24.61	-90.00	-138.00	-447.00	660.00	611.72	48.28	13.671	
7,000.00	6,987.61	7,008.66	6,987.61	24.63	24.95	-90.00	-138.00	-447.00	660.00	611.02	48.98	13.476	
7,100.00	7,087.61	7,108.66	7,087.61	24.98	25.30	-90.00	-138.00	-447.00	660.00	610.33	49.67	13.287	
7,200.00	7,187.61	7,208.66	7,187.61	25.33	25.64	-90.00	-138.00	-447.00	660.00	609.63	50.37	13.102	
7,300.00	7,287.61	7,308.66	7,287.61	25.68	25.99	-90.00	-138.00	-447.00	660.00	608.93	51.07	12.922	
7,400.00	7,387.61	7,408.66	7,387.61	26.03	26.33	-90.00	-138.00	-447.00	660.00	608.22	51.78	12.747	
7,500.00	7,487.61	7,508.66	7,487.61	26.38	26.68	-90.00	-138.00	-447.00	660.00	607.52	52.48	12.577	
7,600.00	7,587.61	7,608.66	7,587.61	26.73	27.03	-90.00	-138.00	-447.00	660.00	606.82	53.18	12.411	
7,700.00	7,687.61	7,708.66	7,687.61	27.09	27.37	-90.00	-138.00	-447.00	660.00	606.12	53.88	12.249	
7,800.00	7,787.61	7,808.66	7,787.61	27.44	27.72	-90.00	-138.00	-447.00	660.00	605.42	54.58	12.092	
7,900.00	7,887.61	7,908.66	7,887.61	27.79	28.07	-90.00	-138.00	-447.00	660.00	604.71	55.29	11.938	
8,000.00	7,987.61	8,008.66	7,987.61	28.14	28.42	-90.00	-138.00	-447.00	660.00	604.01	55.99	11.788	
8,100.00	8,087.61	8,108.66	8,087.61	28.49	28.76	-90.00	-138.00	-447.00	660.00	603.31	56.69	11.642	
8,200.00	8,187.61	8,208.66	8,187.61	28.84	29.11	-90.00	-138.00	-447.00	660.00	602.60	57.40	11.499	
8,300.00	8,287.61	8,308.66	8,287.61	29.19	29.46	-90.00	-138.00	-447.00	660.00	601.90	58.10	11.360	
8,400.00	8,387.61	8,408.66	8,387.61	29.55	29.81	-90.00	-138.00	-447.00	660.00	601.19	58.81	11.224	
8,500.00	8,487.61	8,508.66	8,487.61	29.90	30.16	-90.00	-138.00	-447.00	660.00	600.49	59.51	11.091	
8,600.00	8,587.61	8,608.66	8,587.61	30.25	30.51	-90.00	-138.00	-447.00	660.00	599.78	60.22	10.961	
8,700.00	8,687.61	8,708.66	8,687.61	30.60	30.86	-90.00	-138.00	-447.00	660.00	599.08	60.92	10.834	
8,800.00	8,787.61	8,808.66	8,787.61	30.96	31.21	-90.00	-138.00	-447.00	660.00	598.37	61.63	10.710	
8,900.00	8,887.61	8,908.66	8,887.61	31.31	31.56	-90.00	-138.00	-447.00	660.00	597.67	62.33	10.588	
9,000.00	8,987.61	9,008.66	8,987.61	31.66	31.91	-90.00	-138.00	-447.00	660.00	596.96	63.04	10.470	
9,100.00	9,087.61	9,108.66	9,087.61	32.02	32.26	-90.00	-138.00	-447.00	660.00	596.26	63.74	10.354	
9,200.00	9,187.61	9,208.66	9,187.61	32.37	32.61	-90.00	-138.00	-447.00	660.00	595.55	64.45	10.240	
9,300.00	9,287.61	9,308.66	9,287.61	32.72	32.96	-90.00	-138.00	-447.00	660.00	594.84	65.16	10.129	
9,400.00	9,387.61	9,408.66	9,387.61	33.08	33.31	-90.00	-138.00	-447.00	660.00	594.14	65.86	10.021	
9,500.00	9,487.61	9,508.66	9,487.61	33.43	33.66	-90.00	-138.00	-447.00	660.00	593.43	66.57	9.914	
9,600.00	9,587.61	9,608.66	9,587.61	33.78	34.01	-90.00	-138.00	-447.00	660.00	592.72	67.28	9.810	
9,700.00	9,687.61	9,708.66	9,687.61	34.14	34.36	-90.00	-138.00	-447.00	660.00	592.01	67.99	9.708	
9,726.42	9,714.03	9,735.08	9,714.03	34.23	34.46	-90.00	-138.00	-447.00	660.00	591.83	68.17	9.681	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 224H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,750.00	9,737.60	9,758.88	9,737.83	34.31	34.54	-90.49	-137.55	-447.00	660.00	591.66	68.34	9.657	
9,800.00	9,787.41	9,809.39	9,788.14	34.49	34.71	-90.50	-133.32	-446.96	660.00	591.31	68.69	9.609	
9,850.00	9,836.66	9,859.89	9,837.88	34.66	34.88	-90.50	-124.67	-446.89	660.00	590.97	69.03	9.561	
9,900.00	9,884.97	9,910.40	9,886.67	34.82	35.05	-90.49	-111.69	-446.77	660.00	590.65	69.35	9.516	
9,950.00	9,931.98	9,960.89	9,934.12	34.98	35.20	-90.49	-94.46	-446.63	660.00	590.33	69.67	9.473	
10,000.00	9,977.33	10,011.38	9,979.86	35.12	35.34	-90.47	-73.12	-446.45	660.00	590.02	69.97	9.432	
10,050.00	10,020.68	10,061.85	10,023.54	35.26	35.47	-90.46	-47.85	-446.23	660.00	589.73	70.27	9.393	
10,100.00	10,061.70	10,112.31	10,064.80	35.38	35.59	-90.44	-18.85	-445.98	660.00	589.45	70.55	9.355	
10,150.00	10,100.07	10,162.75	10,103.35	35.49	35.70	-90.42	13.65	-445.70	659.99	589.17	70.82	9.319	
10,200.00	10,135.50	10,213.16	10,138.86	35.59	35.79	-90.39	49.40	-445.40	659.99	588.90	71.09	9.284	
10,250.00	10,167.72	10,263.55	10,171.09	35.69	35.86	-90.37	88.12	-445.07	659.99	588.64	71.35	9.250	
10,300.00	10,196.49	10,313.90	10,199.77	35.80	35.93	-90.34	129.48	-444.71	659.99	588.38	71.60	9.217	
10,350.00	10,221.59	10,364.22	10,224.69	35.92	35.98	-90.30	173.18	-444.34	659.99	588.13	71.86	9.185	
10,400.00	10,242.83	10,414.51	10,245.68	36.04	36.08	-90.27	218.86	-443.95	659.98	587.88	72.11	9.153	
10,450.00	10,260.04	10,464.76	10,262.57	36.17	36.21	-90.23	266.16	-443.54	659.98	587.62	72.36	9.121	
10,476.42	10,267.46	10,491.28	10,269.80	36.24	36.27	-90.21	291.68	-443.33	659.98	587.49	72.49	9.104	
10,500.00	10,273.29	10,514.93	10,275.51	36.30	36.34	-90.20	314.62	-443.13	659.98	587.37	72.61	9.089	
10,550.00	10,283.75	10,565.04	10,285.73	36.43	36.47	-90.17	363.68	-442.71	659.98	587.11	72.87	9.057	
10,600.00	10,291.65	10,615.15	10,293.36	36.57	36.61	-90.15	413.19	-442.28	659.98	586.83	73.14	9.023	
10,650.00	10,296.95	10,665.24	10,298.38	36.71	36.76	-90.12	463.02	-441.86	659.98	586.55	73.43	8.988	
10,700.00	10,299.64	10,715.31	10,300.78	36.86	36.91	-90.10	513.03	-441.43	659.98	586.26	73.72	8.952	
10,724.27	10,300.00	10,739.60	10,301.00	36.94	36.99	-90.09	537.32	-441.22	659.98	586.11	73.87	8.935	
10,726.42	10,300.00	10,741.75	10,301.00	36.95	36.99	-90.09	539.47	-441.20	659.98	586.10	73.88	8.933	
10,800.00	10,300.00	10,815.33	10,301.00	37.19	37.24	-90.09	613.05	-440.57	659.98	585.62	74.36	8.875	
10,900.00	10,300.00	10,915.33	10,301.00	37.56	37.62	-90.09	713.05	-439.71	659.98	584.87	75.10	8.788	
11,000.00	10,300.00	11,015.33	10,301.00	37.99	38.04	-90.09	813.04	-438.85	659.98	584.03	75.95	8.690	
11,100.00	10,300.00	11,115.33	10,301.00	38.47	38.52	-90.09	913.04	-437.99	659.98	583.08	76.89	8.583	
11,200.00	10,300.00	11,215.33	10,301.00	38.99	39.05	-90.09	1,013.03	-437.13	659.98	582.04	77.94	8.468	
11,300.00	10,300.00	11,315.33	10,301.00	39.56	39.61	-90.09	1,113.03	-436.27	659.98	580.91	79.07	8.346	
11,400.00	10,300.00	11,415.33	10,301.00	40.18	40.23	-90.09	1,213.03	-435.41	659.98	579.68	80.30	8.219	
11,500.00	10,300.00	11,515.33	10,301.00	40.83	40.88	-90.09	1,313.02	-434.55	659.98	578.37	81.61	8.087	
11,600.00	10,300.00	11,615.33	10,301.00	41.53	41.58	-90.09	1,413.02	-433.69	659.98	576.98	83.00	7.952	
11,700.00	10,300.00	11,715.33	10,301.00	42.27	42.31	-90.09	1,513.02	-432.83	659.98	575.51	84.47	7.813	
11,800.00	10,300.00	11,815.33	10,301.00	43.04	43.08	-90.09	1,613.01	-431.97	659.98	573.97	86.01	7.673	
11,900.00	10,300.00	11,915.33	10,301.00	43.84	43.89	-90.09	1,713.01	-431.11	659.98	572.36	87.62	7.532	
12,000.00	10,300.00	12,015.33	10,301.00	44.68	44.72	-90.09	1,813.00	-430.25	659.98	570.69	89.30	7.391	
12,100.00	10,300.00	12,115.33	10,301.00	45.55	45.59	-90.09	1,913.00	-429.39	659.98	568.95	91.03	7.250	
12,200.00	10,300.00	12,215.33	10,301.00	46.45	46.49	-90.09	2,013.00	-428.53	659.98	567.15	92.83	7.110	
12,300.00	10,300.00	12,315.33	10,301.00	47.38	47.41	-90.09	2,112.99	-427.67	659.98	565.30	94.68	6.971	
12,400.00	10,300.00	12,415.33	10,301.00	48.33	48.36	-90.09	2,212.99	-426.81	659.98	563.40	96.58	6.833	
12,500.00	10,300.00	12,515.33	10,301.00	49.31	49.34	-90.09	2,312.99	-425.95	659.98	561.45	98.54	6.698	
12,600.00	10,300.00	12,615.33	10,301.00	50.31	50.33	-90.09	2,412.98	-425.09	659.98	559.45	100.54	6.565	
12,700.00	10,300.00	12,715.33	10,301.00	51.33	51.35	-90.09	2,512.98	-424.23	659.98	557.41	102.58	6.434	
12,800.00	10,300.00	12,815.33	10,301.00	52.37	52.39	-90.09	2,612.97	-423.37	659.98	555.33	104.66	6.306	
12,900.00	10,300.00	12,915.33	10,301.00	53.43	53.45	-90.09	2,712.97	-422.51	659.99	553.20	106.78	6.181	
13,000.00	10,300.00	13,015.33	10,301.00	54.51	54.53	-90.09	2,812.97	-421.65	659.99	551.05	108.94	6.058	
13,100.00	10,300.00	13,115.33	10,301.00	55.61	55.62	-90.09	2,912.96	-420.79	659.99	548.86	111.13	5.939	
13,200.00	10,300.00	13,215.33	10,301.00	56.72	56.73	-90.09	3,012.96	-419.93	659.99	546.63	113.35	5.822	
13,300.00	10,300.00	13,315.33	10,301.00	57.85	57.86	-90.09	3,112.96	-419.07	659.99	544.38	115.61	5.709	
13,400.00	10,300.00	13,415.33	10,301.00	58.99	59.00	-90.09	3,212.95	-418.21	659.99	542.10	117.89	5.598	
13,500.00	10,300.00	13,515.33	10,301.00	60.14	60.15	-90.09	3,312.95	-417.35	659.99	539.79	120.20	5.491	
13,600.00	10,300.00	13,615.33	10,301.00	61.31	61.32	-90.09	3,412.95	-416.49	659.99	537.46	122.53	5.386	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 228H
Project:	Eddy County, NM (NAD27 NME)	**TVD Reference:**	RKB @ 3128.50usft (Patterson 297)
Reference Site:	Charlie Sweeney Federal 31-23S-28E	**MD Reference:**	RKB @ 3128.50usft (Patterson 297)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	228H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	Compass 5000 GCR
Reference Design:	Preliminary Plan 1	**Offset TVD Reference:**	Reference Datum

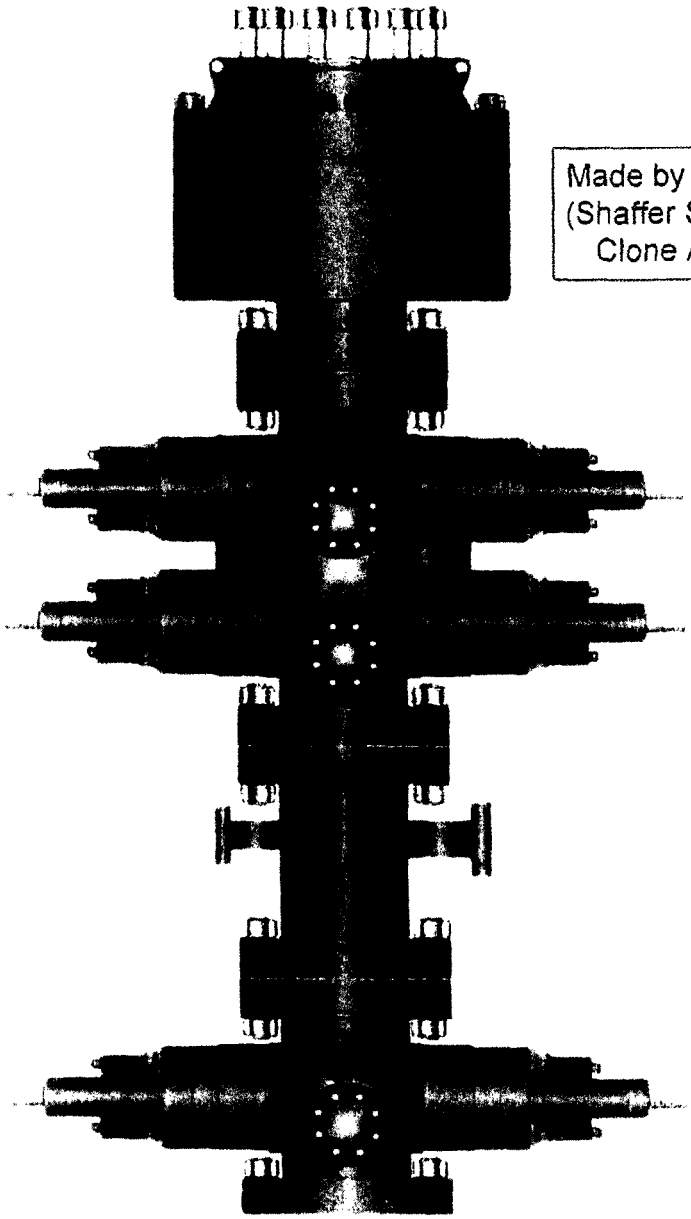
Offset Design Charlie Sweeney Federal 31-23S-28E - 224H - OH - Preliminary Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-PHX+MWD+HDGM — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.00	10,300.00	13,715.33	10,301.00	62.49	62.49	-90.09	3,512.94	-415.63	659.99	535.10	124.89	5.285	
13,800.00	10,300.00	13,815.33	10,301.00	63.68	63.68	-90.09	3,612.94	-414.77	659.99	532.72	127.27	5.186	
13,900.00	10,300.00	13,915.33	10,301.00	64.88	64.88	-90.09	3,712.93	-413.91	659.99	530.32	129.67	5.090	
14,000.00	10,300.00	14,015.33	10,301.00	66.09	66.09	-90.09	3,812.93	-413.05	659.99	527.89	132.10	4.996	
14,100.00	10,300.00	14,115.33	10,301.00	67.31	67.31	-90.09	3,912.93	-412.19	659.99	525.45	134.54	4.906	
14,200.00	10,300.00	14,215.33	10,301.00	68.54	68.54	-90.09	4,012.92	-411.33	659.99	522.99	137.00	4.818	
14,300.00	10,300.00	14,315.33	10,301.00	69.78	69.78	-90.09	4,112.92	-410.47	659.99	520.52	139.47	4.732	
14,400.00	10,300.00	14,415.33	10,301.00	71.03	71.02	-90.09	4,212.92	-409.61	659.99	518.02	141.97	4.649	
14,500.00	10,300.00	14,515.33	10,301.00	72.28	72.28	-90.09	4,312.91	-408.75	659.99	515.52	144.48	4.568	
14,600.00	10,300.00	14,615.33	10,301.00	73.54	73.54	-90.09	4,412.91	-407.89	659.99	512.99	147.00	4.490	
14,700.00	10,300.00	14,715.33	10,301.00	74.81	74.80	-90.09	4,512.90	-407.03	659.99	510.46	149.54	4.414	
14,800.00	10,300.00	14,815.33	10,301.00	76.09	76.08	-90.09	4,612.90	-406.17	659.99	507.91	152.09	4.340	
14,900.00	10,300.00	14,915.33	10,301.00	77.37	77.36	-90.09	4,712.90	-405.31	659.99	505.34	154.65	4.268	
15,000.00	10,300.00	15,015.33	10,301.00	78.65	78.64	-90.09	4,812.89	-404.45	659.99	502.77	157.22	4.198	
15,030.52	10,300.00	15,045.85	10,301.00	79.05	79.04	-90.09	4,843.41	-404.19	659.99	501.98	158.01	4.177	
15,055.78	10,300.00	15,068.02	10,301.00	79.38	79.33	-90.09	4,865.58	-404.00	660.00	501.38	158.62	4.161 SF	

PATTERSON-UTI
Well Control

RIG 297



Made by Cameron
(Shaffer Spherical)
Clone Annular

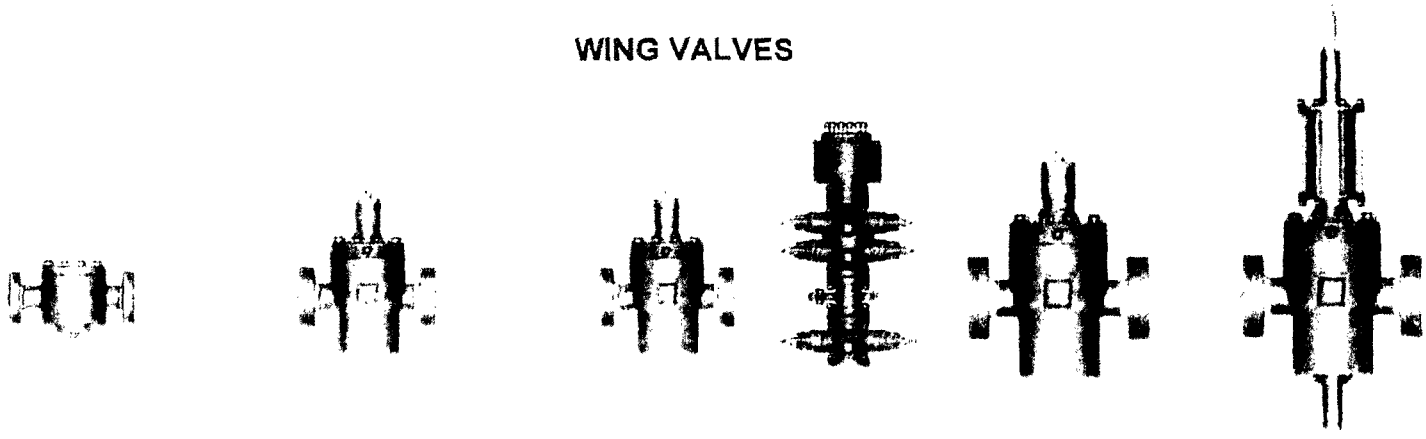
PATTERSON-UTI # PS2-628
STYLE: New Shaffer Spherical
BORE 13 5/8" PRESSURE 5,000
HEIGHT: 48 ½" WEIGHT: 13,800 lbs

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

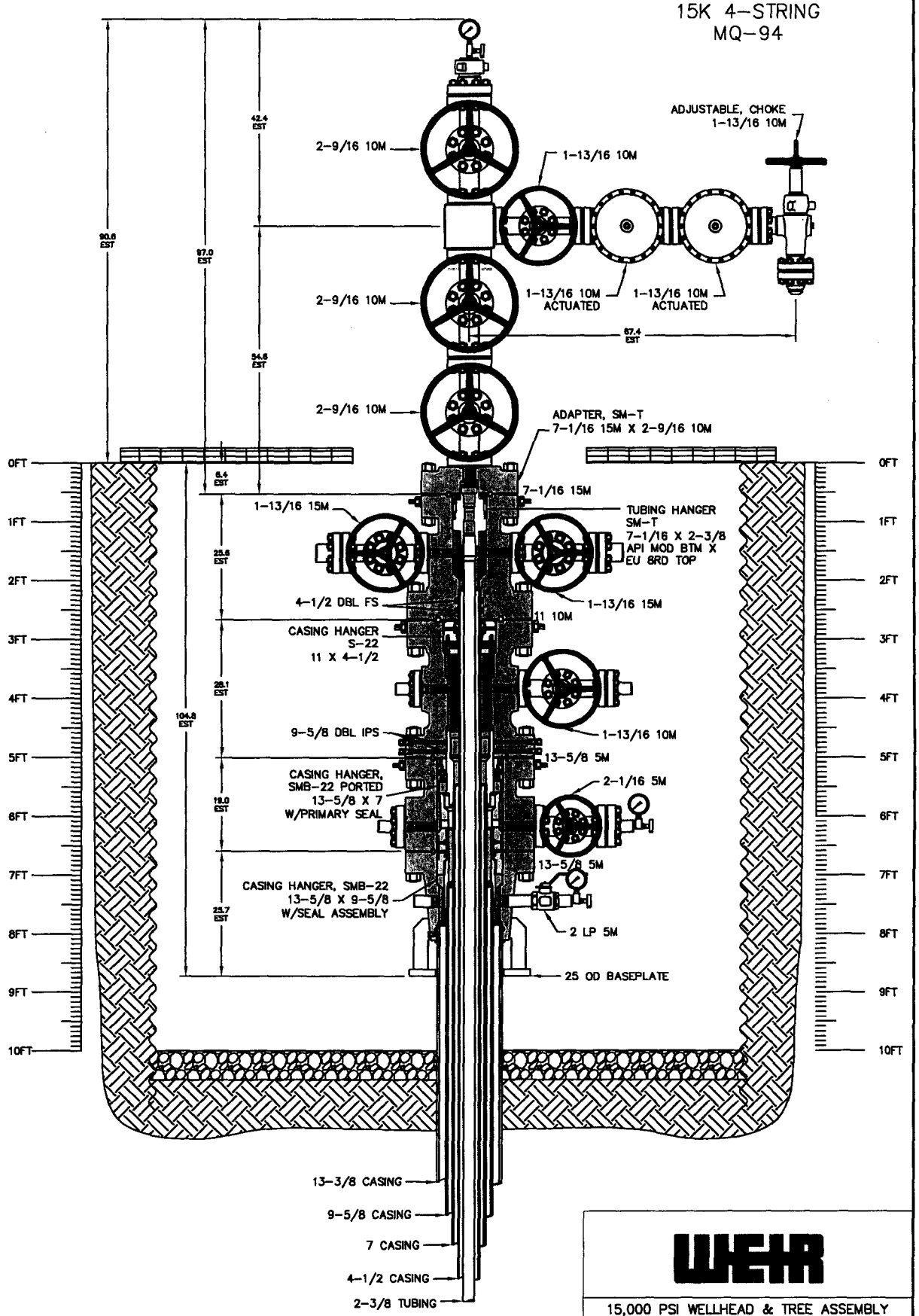
PATTERSON-UTI # PC2-228
STYLE: New Cameron Type U
BORE 13 5/8" PRESSURE 10,000
RAMS: 5" Pipe
HEIGHT: 41 5/8" WEIGHT: 13,000 lbs

WING VALVES



2" Check Valve | 2" Manual Valve | 2" Manual Valve | 4" Manual Valve | 4" Hydraulic Valve

MATADOR
15K 4-STRING
MQ-94

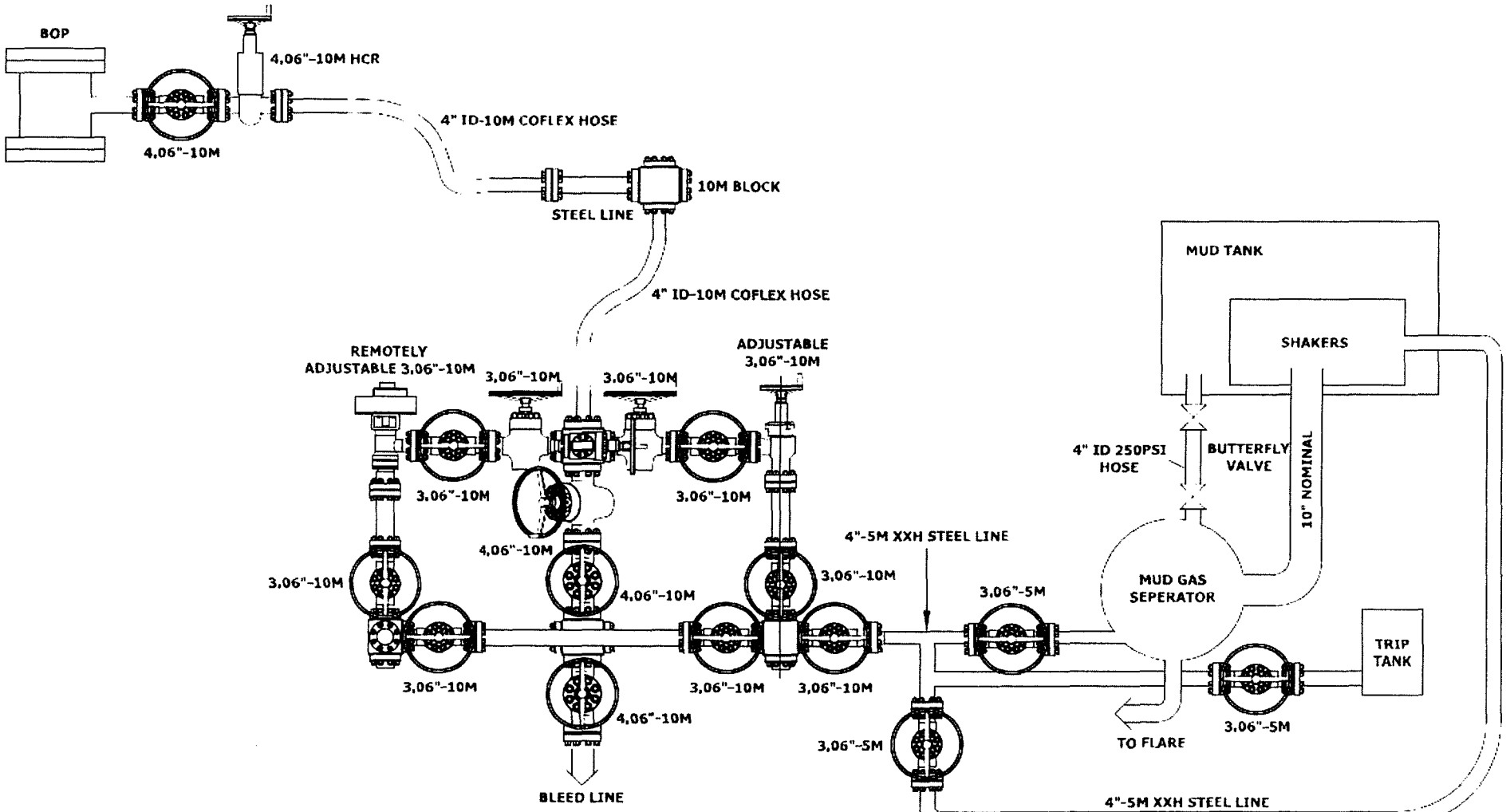


NOTE:
DIMENSIONS SHOWN ON THIS DRAWING ARE ESTIMATES ONLY AND CAN VARY SIGNIFICANTLY DEPENDING ON RAW MATERIAL LENGTHS. NO GUARANTEE OF STACKUP HEIGHT IS IMPLIED. DIMENSIONS SHOWN SHOULD BE CONSIDERED FOR REFERENCE PURPOSES ONLY.

WEIR

15,000 PSI WELLHEAD & TREE ASSEMBLY
13-3/8 X 9-5/8 X 7 X 4-1/2 X 2-3/8

DRAWN BY:	RPL	SCALE	1:10	DATE	18JAN16	REV
CHECKED BY:		DRAWING NO.	P-20986			
APPROVED BY:						



PATTERSON-UTI
DRILLING COMPANY LLC

CHOKE MANIFOLD

R0297-D.001.LAY.09

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

December 8, 2014

Customer: Patterson

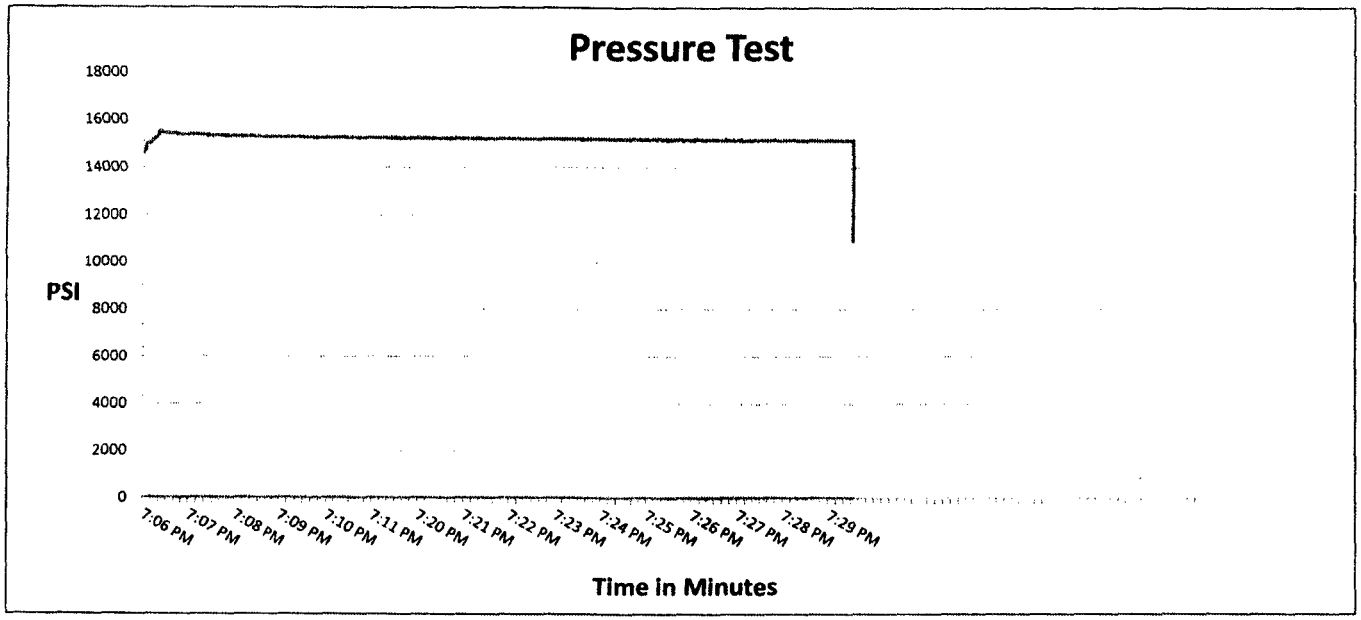
Pick Ticket #: 284918

Hose Specifications

Hose Type	Length
Ck	10'
I.D.	**O.D.**
3"	4.79"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4-1/16 10K	Swage
Die Size	**Final O.D.**
5.37"	5.37"
Hose Serial #	**Hose Assembly Serial #**
10490	284918-2



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	15 2/4 Minutes		15732 PSI

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

Tested By: *Tyler Hill*

x

Approved By: *Ryan Adams*

x

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
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-2	Hose O.D. (Inches)	5.30"
Hose Assembly Length	10'	Armor (yes/no)	YES

Fittings			
End A		**End B**	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	91996	Stem (Heat #)	91996
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)		Connection (Heat #)	
Dies Used	5.37	Dies Used	5.37

Hydrostatic Test Requirements		
Test Pressure (psi)	15,000	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	15 1/2	

Date Tested	Tested By	Approved By
12/8/2014		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON B&E**	*Customer P.O.#* **260471**
Sales Order # **236404**	*Date Assembled:* **12/8/2014**

Specifications

Hose Assembly Type:	**Choke & Kill**		
Assembly Serial #	**287918-2**	*Hose Lot # and Date Code*	**10490-01/13**
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***
Ryan Adams	**12/9/2014**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

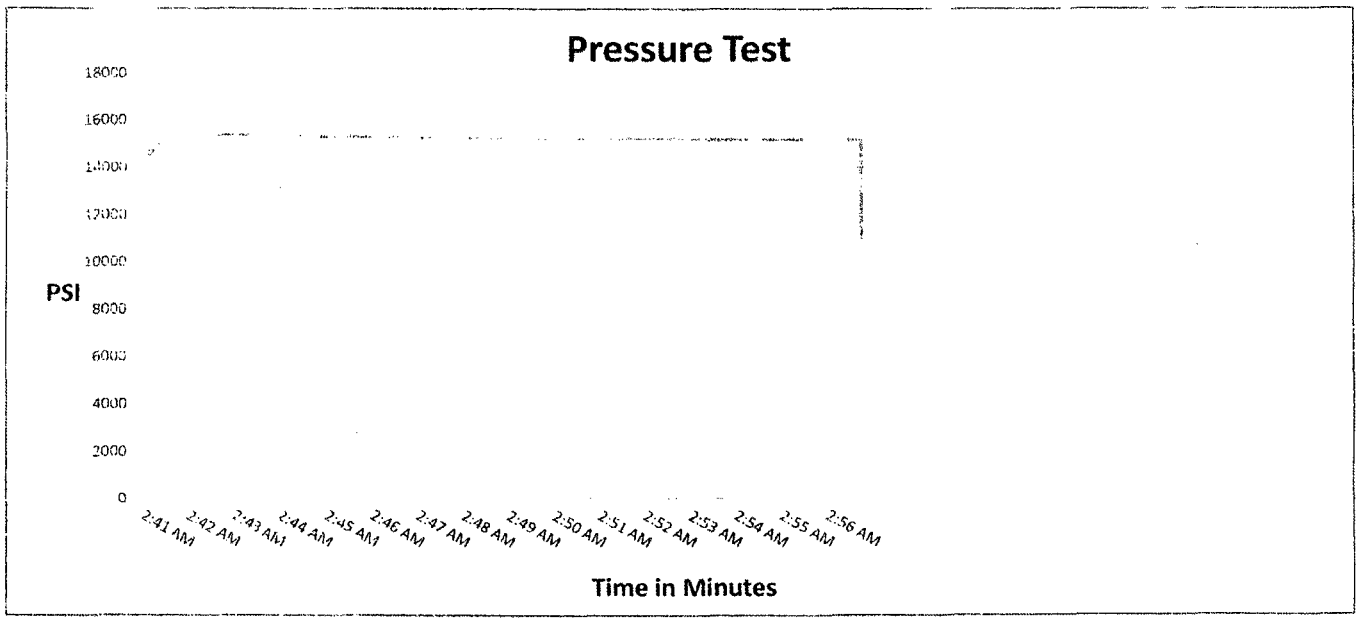
Pick Ticket #: 284918

Hose Specifications

Hose Type	Length
Ck	20'
I.D.	**O.D.**
3"	4.77"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4-1/16 10K	Swage
Die Size	**Final O.D.**
5.37"	5.40"
Hose Serial #	**Hose Assembly Serial #**
10490	284918-1



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	15 2/4 Minutes		15893 PSI

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

Tested By: *Tyler Hill*

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
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-1	Hose O.D. (Inches)	5.30"
Hose Assembly Length	20'	Armor (yes/no)	YES

Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	A141420	Stem (Heat #)	A141420
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)	V3579	Connection (Heat #)	V3579
Dies Used	5.37	Dies Used	5.37

Hydrostatic Test Requirements		
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.
Test Pressure Hold Time (minutes)	15 1/2	

Date Tested	Tested By	Approved By
12/9/2014		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON B&E**	*Customer P.O.#* **260471**
Sales Order # **236404**	*Date Assembled:* **12/8/2014**

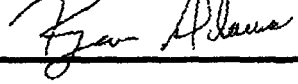
Specifications

Hose Assembly Type:	**Choke & Kill**		
Assembly Serial #	**287918-1**	*Hose Lot # and Date Code*	**10490-01/13**
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***
	**12/9/2014**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

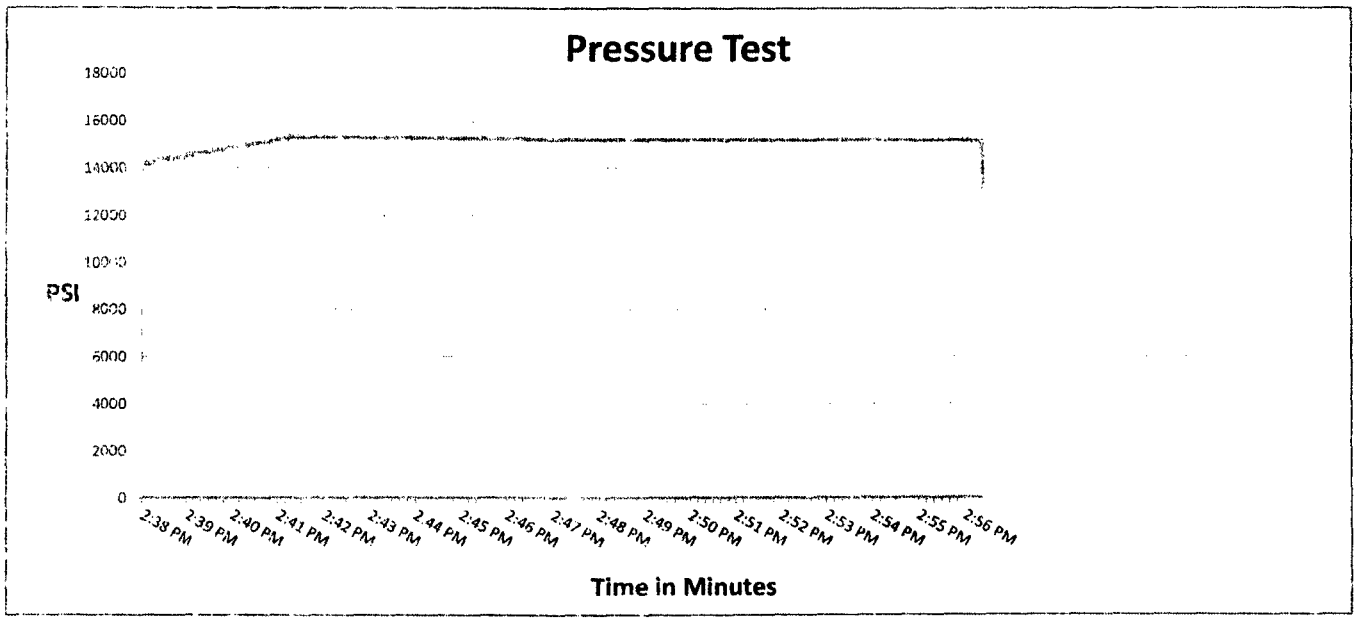
Pick Ticket #: 284918

Hose Specifications

Hose Type	Length
Mud	70'
I.D.	**O.D.**
3"	4.79"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4 1/16 10K	Swage
Die Size	**Final O.D.**
5.37"	5.37"
Hose Serial #	**Hose Assembly Serial #**
10490	284918-3



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	16 3/4 Minutes		15410 PSI

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

Tested By: *Tyler Hill*

x

Approved By: *Ryan Adams*

x

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
Date Assembled	12/8/2014	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #	236404	Hose Lot # and Date Code	10490-01/13
Customer Purchase Order #	260471	Hose I.D. (Inches)	3"
Assembly Serial # (Pick Ticket #)	287918-3	Hose O.D. (Inches)	5.23"
Hose Assembly Length	70'	Armor (yes/no)	YES

Fittings			
End A		End B	
Stem (Part and Revision #)	R3.0X64WB	Stem (Part and Revision #)	R3.0X64WB
Stem (Heat #)	A141420	Stem (Heat #)	A141420
Ferrule (Part and Revision #)	RF3.0	Ferrule (Part and Revision #)	RF3.0
Ferrule (Heat #)	37DA5631	Ferrule (Heat #)	37DA5631
Connection (Part #)	4 1/16 10K	Connection (Part #)	4 1/16 10K
Connection (Heat #)		Connection (Heat #)	
Dies Used	5.37	Dies Used	5.37

Hydrostatic Test Requirements		
Test Pressure (psi)	15,000	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	16 3/4	

Date Tested	Tested By	Approved By
12/9/2014		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON B&E**	*Customer P.O.#* **260471**
Sales Order # **236404**	*Date Assembled:* **12/8/2014**

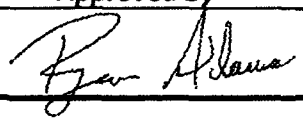
Specifications

Hose Assembly Type:	**Choke & Kill**		
Assembly Serial #	**287918-3**	*Hose Lot # and Date Code*	**10490-01/13**
Hose Working Pressure (psi)	**10000**	*Test Pressure (psi)*	**15000**

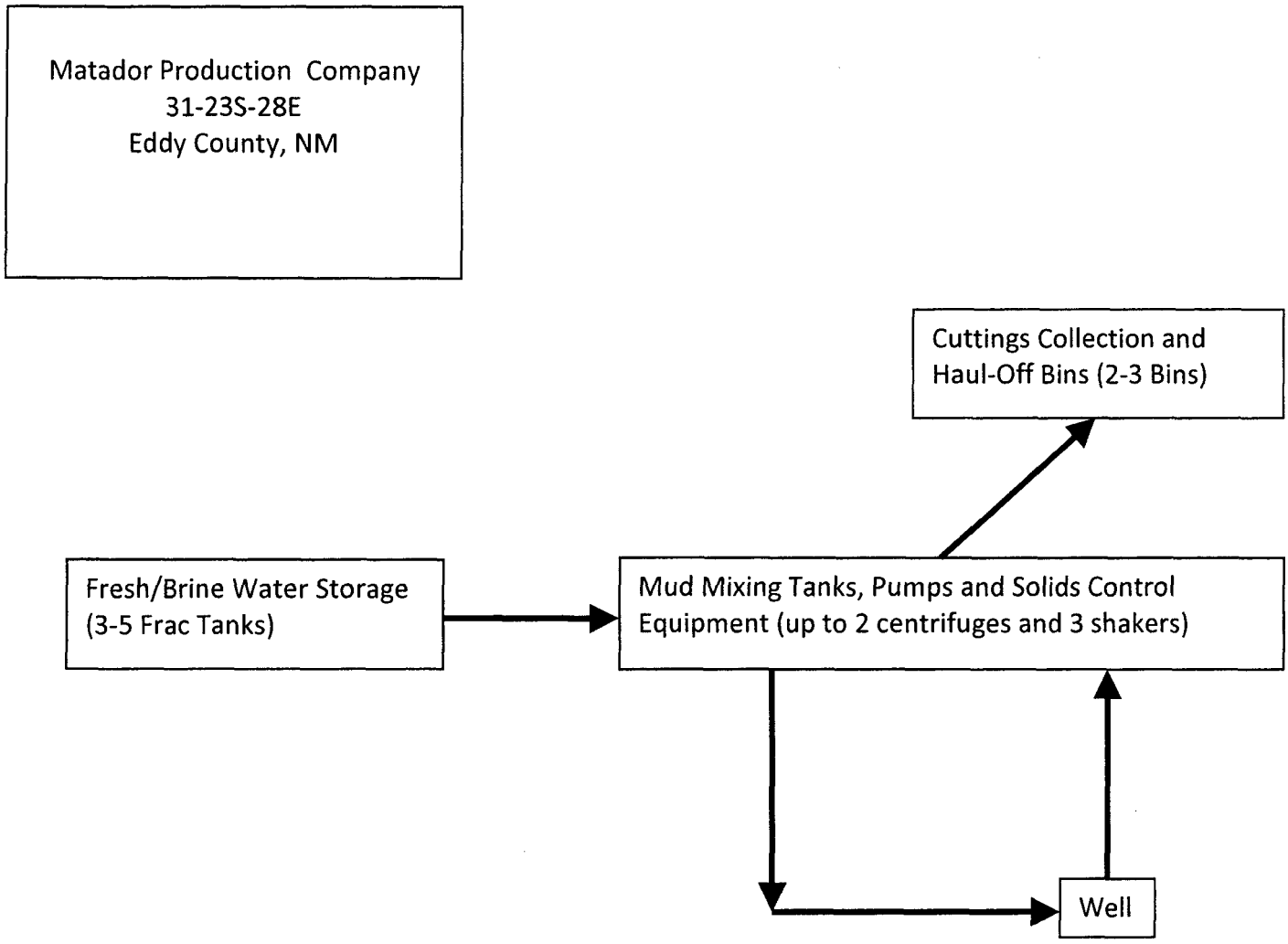
We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

Approved By	***Date***
	**12/9/2014**

Closed-Loop System

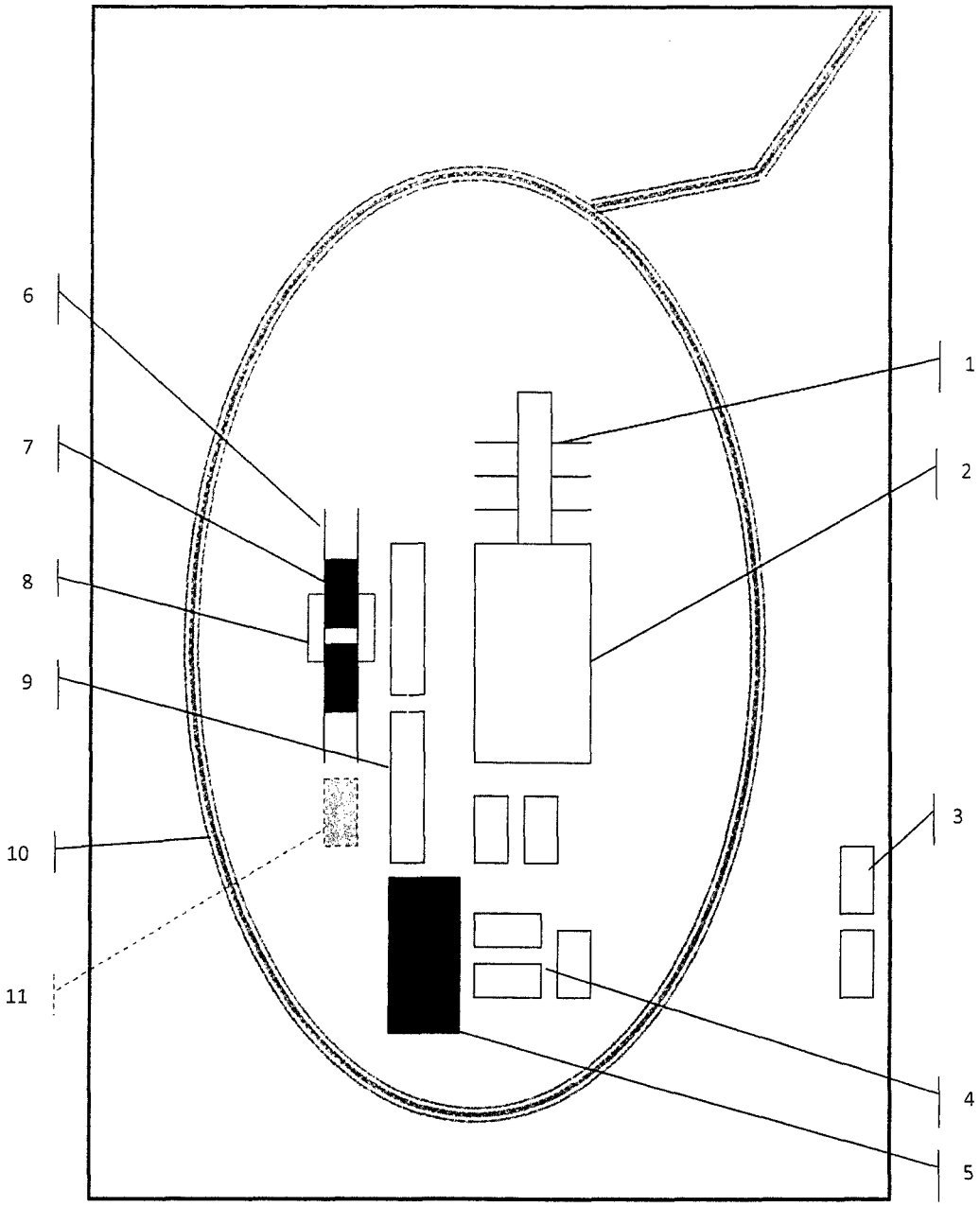


Operating and Maintenance Plan:

During drilling operations, third party service companies will use 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:

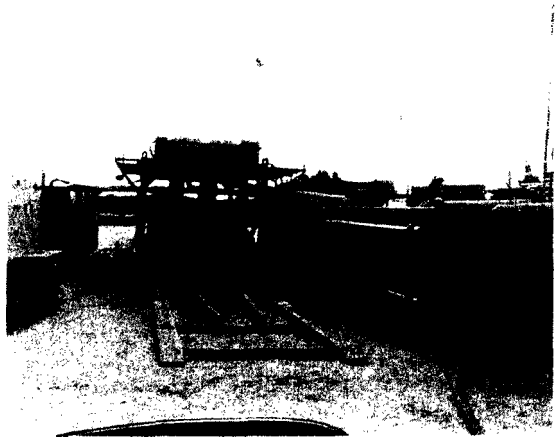
During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.



Schematic Closed Loop Drilling Rig*

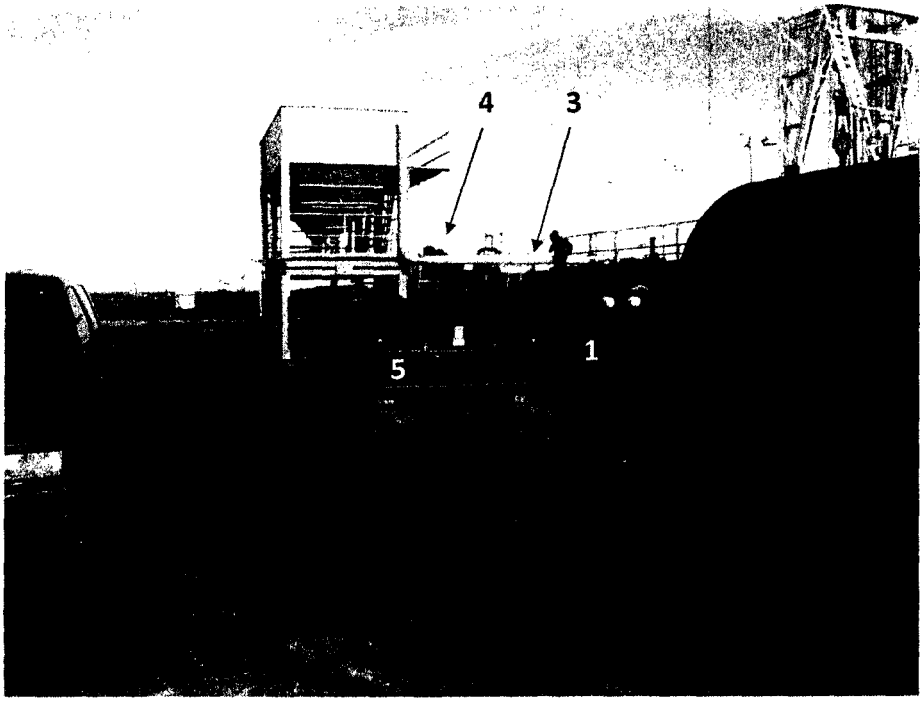
1. **Pipe Rack**
2. **Drill Rig**
3. **House Trailers/ Offices**
4. **Generator/Fuel/Storage**
5. **Overflow-Frac Tank**
6. **Skids**
7. **Roll Offs**
8. **Hopper or Centrifuge**
9. **Mud Tanks**
10. **Loop Drive**
11. Generator (only for use with centrifuge)

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



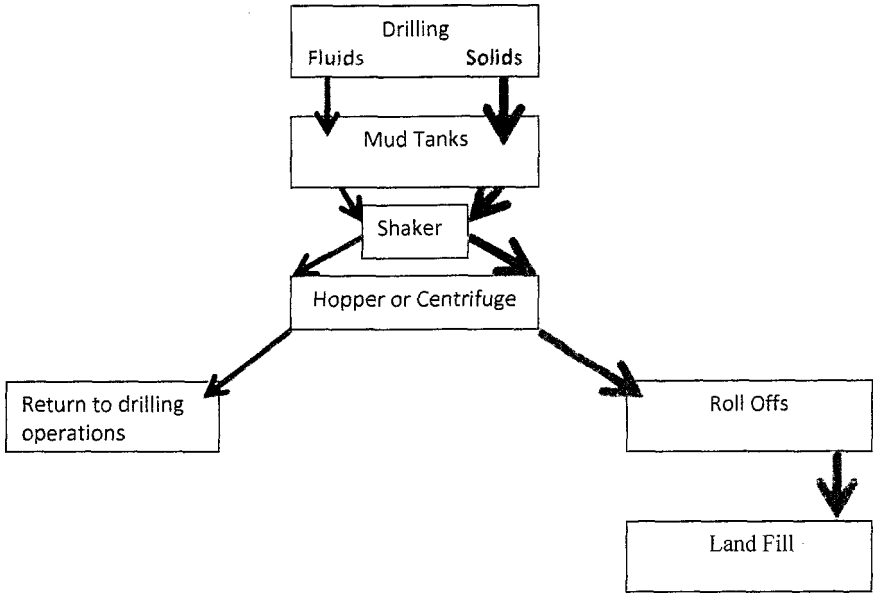
Above: Centrifugal Closed Loop System

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano 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

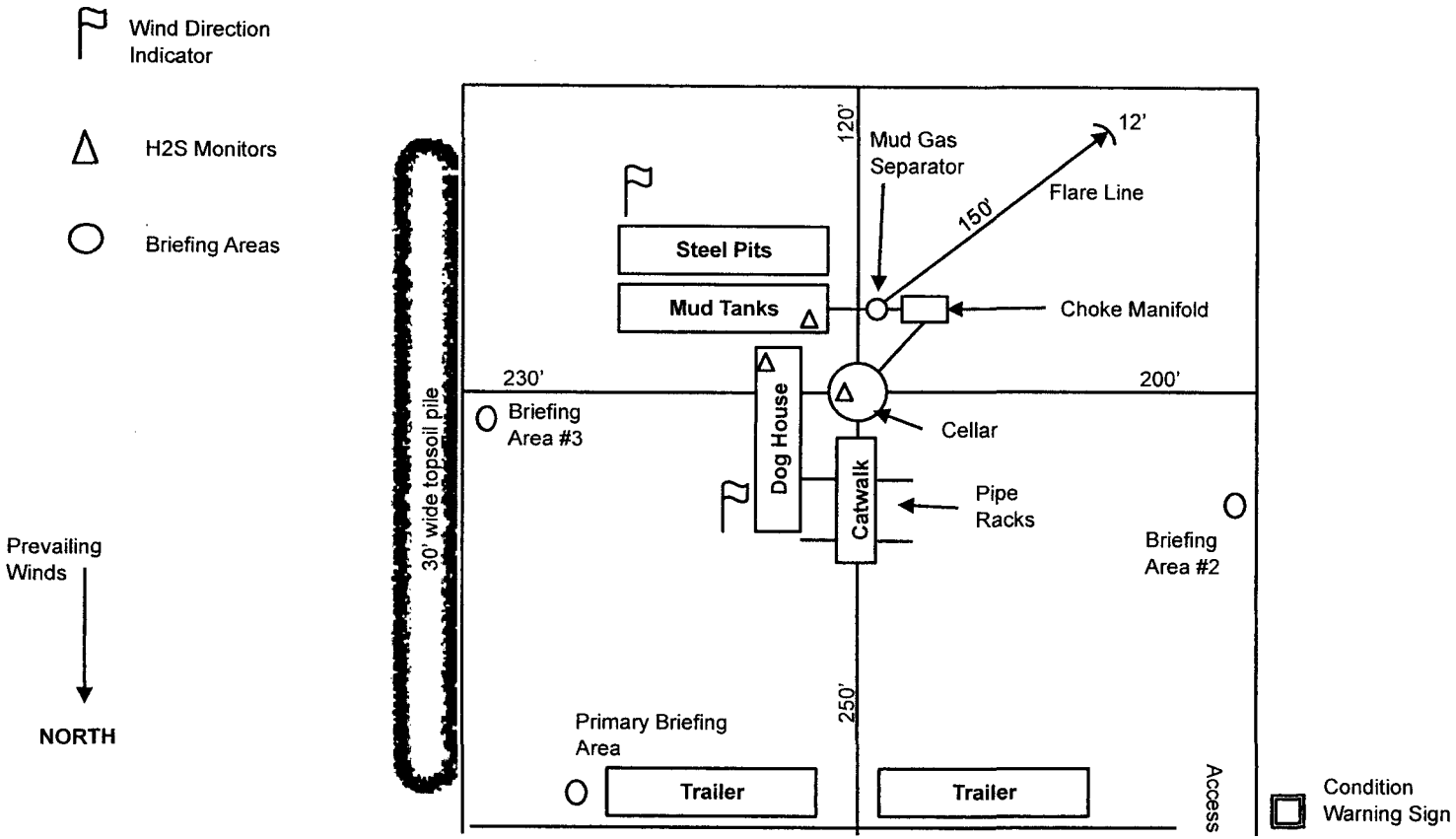


Photos Courtesy of Gandy Corporation Oil Field Service

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

Rig Layout

Charlie Sweeney Fed Com 31-23s-28e #228H
31-23S-28E
Eddy County, NM



Hydrogen Sulfide Drilling Operations Plan

Matador Production Company

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects & 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 to 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
- Windsocks 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 Communications:

- While working under masks, chalkboards will be used for communications
- Hand signals will be used where chalk board 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 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 H2S has on tubulars good and other mechanical equipment

9 If H2S 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 H2S scavengers if necessary

11 Emergency Contacts

- See next page

H2S Contingency Plan Emergency Contacts
Matador Production Company
Sec. 31, 23S, 28E, Eddy County, NM

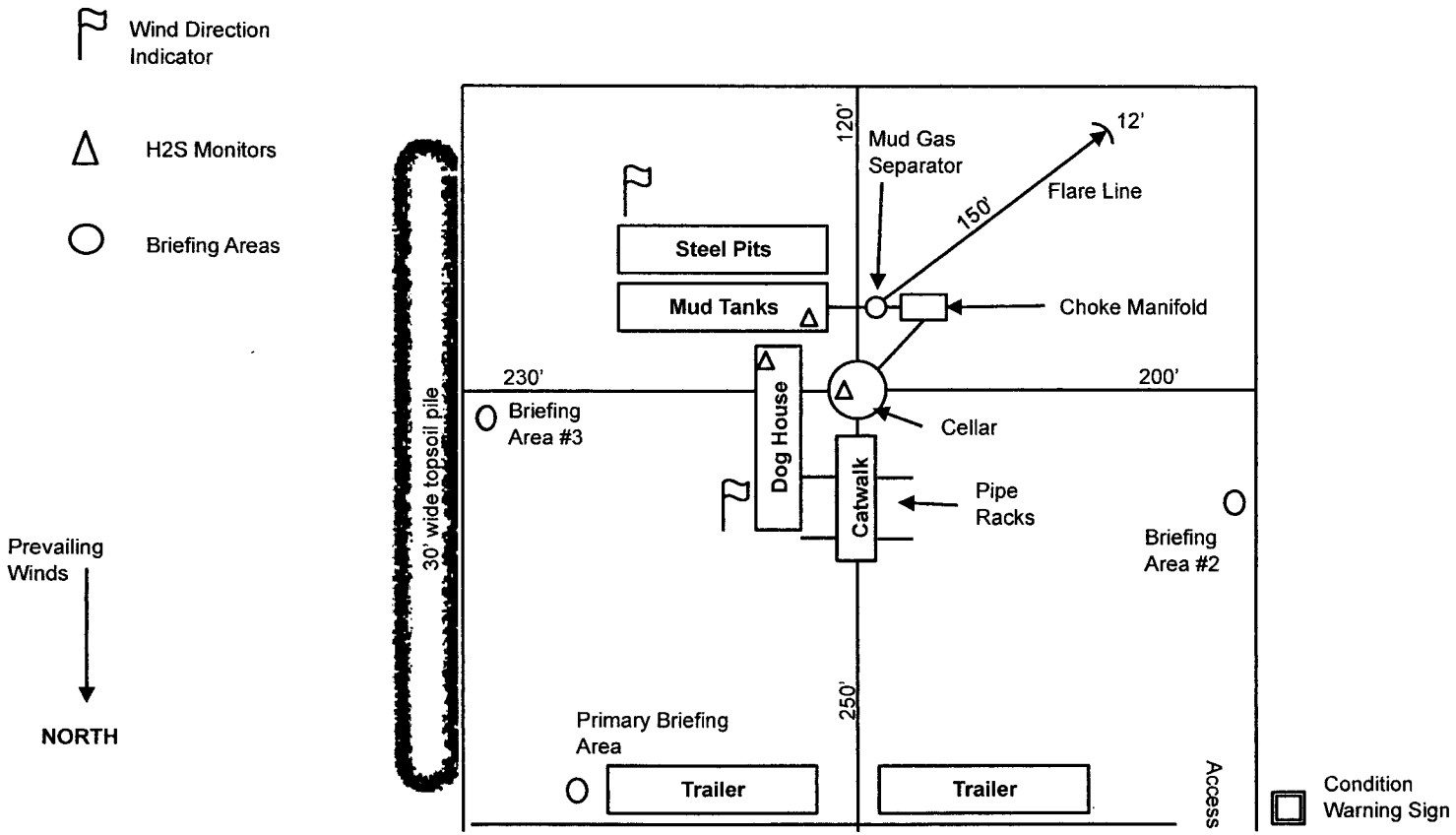
Company Office			
Matador Production Company	(972)-371-5200		
Key Personnel			
Name	**Title**	**Office**	**Mobile**
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Aaron Byrd	Drilling Engineer	972-371-5267	214-507-2333
	Construction Superintendent		
	Construction Superintendent		

Artesia		
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	
Carlsbad		
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	575-887-6544	
New Mexico Oil Conservation Division	575-887-6544	
Santa Fe		
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	
National		
Carlsbad BLM	575-234-5972	
National Emergency Response Center (Washington, D.C.)	800-424-8802	
Medical		
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	

Other		
Boots & Coots IWC	800-256-9688	or 281-931-8884
Cudd Pressure Control	432-699-0139	or 432-563-3356
Halliburton	575-746-2757	
B.J. Services	575-746-3569	

H2S Rig Layout

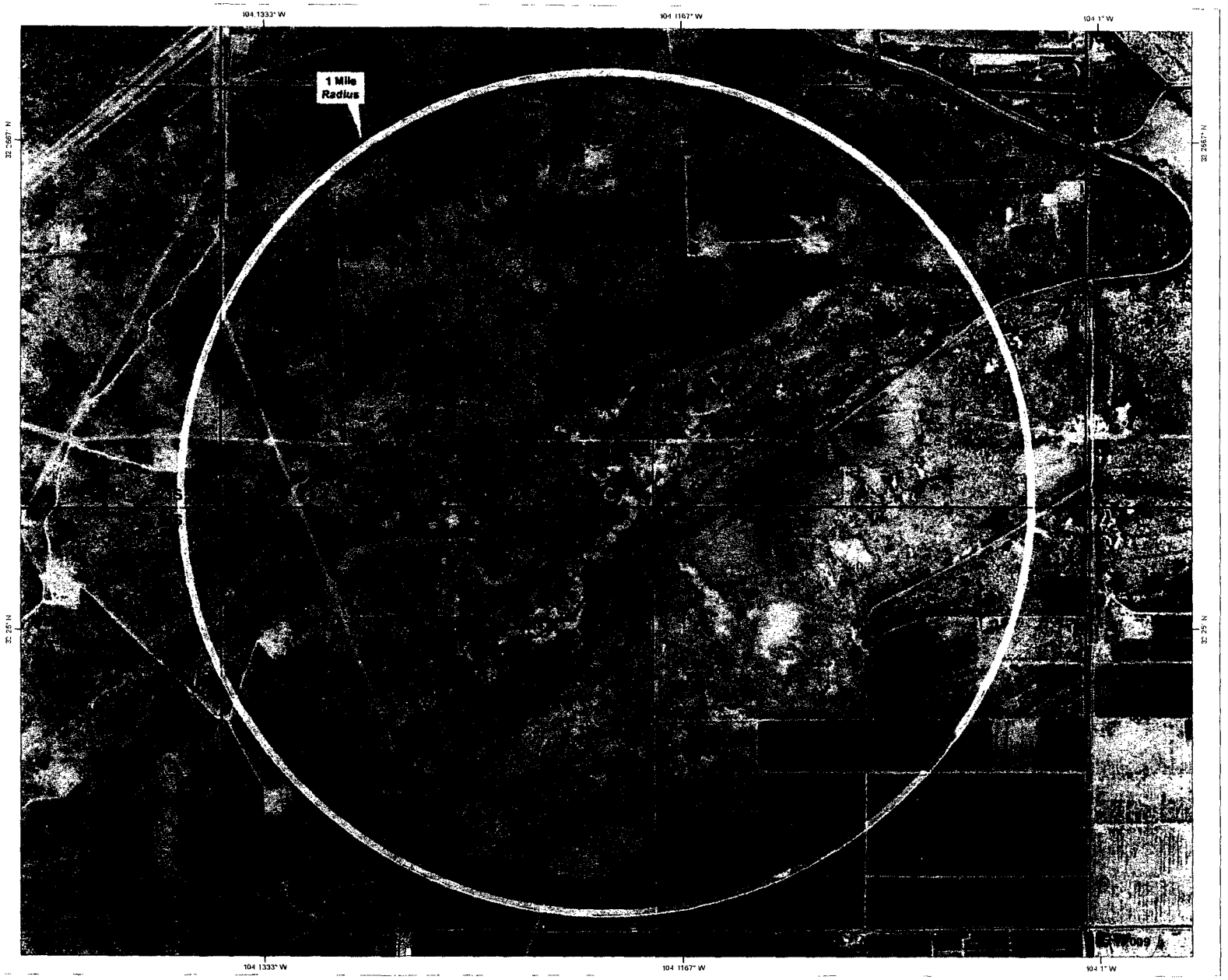
Charlie Sweeney Fed Com 31-23s-28e #228H
31-23S-28E
Eddy County, NM



Matador Production Company

CHARLIE SWEENEY FED COM
31-23S-28E #228H
H_2S Contingency Plan:
1 Mile Radius Map

Section 31, Township 23S, Range 28E
Eddy County, New Mexico



Surface Hole Location

1:13,500

0 0.125 0.25 0.5

Miles

N

NAD 1927 New Mexico State Plane East
FIPS 3001 Feet

Prepared by Permits West, Inc., June 22, 2016
for Matador Production Company

Matador Production Company

CHARLIE SWEENEY FED COM
31-23S-28E #228H
H_2S Contingency Plan:
2 Mile Radius Map

Section 31, Township 23S, Range 28E
Eddy County, New Mexico

Surface Hole Location

1:27,000

0 0.25 0.5 1

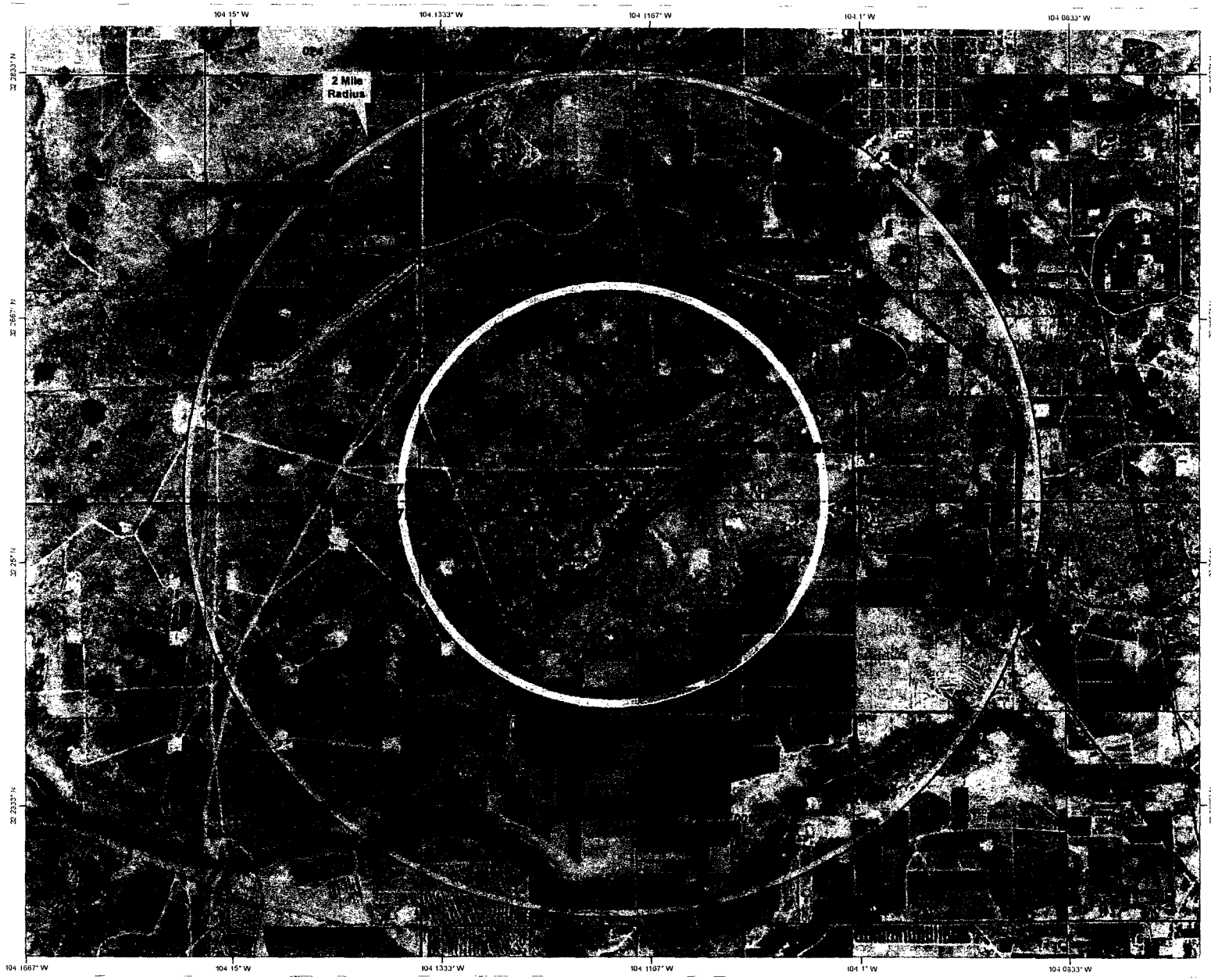
Miles

N

NAD 1927 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., June 22, 2016
for Matador Production Company



Charlie Sweeney Federal 31-23S-28E 228H
SHL 188' FSL & 545' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 330' FEL Sec. 31, T. 23 S., R. 28 E.
Eddy County, NM

Surface Use Plan

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

From the gas stations in Loving, NM...
Go South 1.0 mile on US 285 to a substation
Then turn right onto paved County Road 716 and continue South 0.4 mile
Turn right at a transfer station and go West 2.05 mi. on paved County Rd. 763
Then turn left and go South & SE 0.35 mile on a caliche road to a valve station
Then turn left at the valve station and go Southeast 1082.28' cross-country
Then turn left and go East 0.7 mile on an existing road
Then turn right and go South 296.8' 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 existing caliche pits on private land in NWSE 1-24s-28e and NWSW 6-24s-29e.

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

Road from County Road 763 to the valve station is 2 lanes, crowned, and surfaced with caliche. No upgrade is needed.

All of the road (0.95 mile) from the valve station to the pad will be crowned, have a 14' wide driving surface, and be surfaced with caliche. Maximum disturbed width = 20'. Maximum grade = 4%. Maximum cut or fill = 5'. A cattle guard will be installed in an existing fence. A 36" x 50' culvert will be installed in an old irrigation canal. No vehicle turn out is needed.

3. EXISTING WELLS (See MAP 2)

Existing oil, gas, water, disposal, and P & A wells are within a mile. There are no injection wells within a mile radius.

4. PROPOSED PRODUCTION FACILITIES (See MAPS 3 & 7-10)

Oil tanks, water tanks, meter runs, separators, and a flare will be installed on the north side of the pad (see preceding diagram). A ≈6" O. D. steel buried gas line and ≈6" O. D. HDPE buried saltwater disposal line will be laid 822.41' west and then south in the same trench to Longwood Midstream's Black River Gathering System. ≈4" O. D. HDPE surface low pressure (<125 psi) flow lines may be laid 1184.68' west to the odd number Charlie Sweeney pad. A 3-phase raptor safe overhead power line will be built 4938.61' north to the gas plant power line that is under construction.

5. WATER SUPPLY (See MAPS 3, 11, & 12)

Water will be piped 5442.29' via a ≈10" O. D. surface "Fast Line" from an existing frac pond on private land in S2NW4 31-23s-28e.

6. CONSTRUCTION MATERIALS & METHODS (see MAPS 5-7)

NM One Call (811) will be notified before construction starts. Top ≈6" of soil and brush will be stockpiled east of the pad. Pipe racks will be to the north. A closed loop drilling system will be used. Caliche will be hauled from existing caliche pits on private land in NWSE 1-24s-28e and NWSW 6-24s-29e.

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 Layout diagram for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

Interim reclamation will be completed within 6 months of completing the last well on the pad. (A variance is requested for the intervening wells.) Interim reclamation will consist of shrinking the pad ≈21% by removing caliche and reclaiming the south (30') and east (125') sides. This will leave 2.87 acres for the production equipment, 5 pump jacks, and tractor-trailer turn around. 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 the surface owner'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 will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.

11. SURFACE OWNER

All construction will be on private surface.

Matador Resources Company has a private surface owner agreement with Vickie Connally (R211 Ash Road, Loving NM 88256) for the well site, pipelines, power line, and road in NWSW, S2S2, NWSE, & SWNE Section 31, T. 23 S., R. 28 E. and pipelines in Lot 2 Section 6, T. 24 S., R. 28 E.; all Eddy County, NM.

Matador Resources Company has a private surface owner agreement with Jacob & Merrellee Moore (1011 Bounds Road, Loving NM 88256) for their portion (NWNE 31-23s-28e) of the power line.

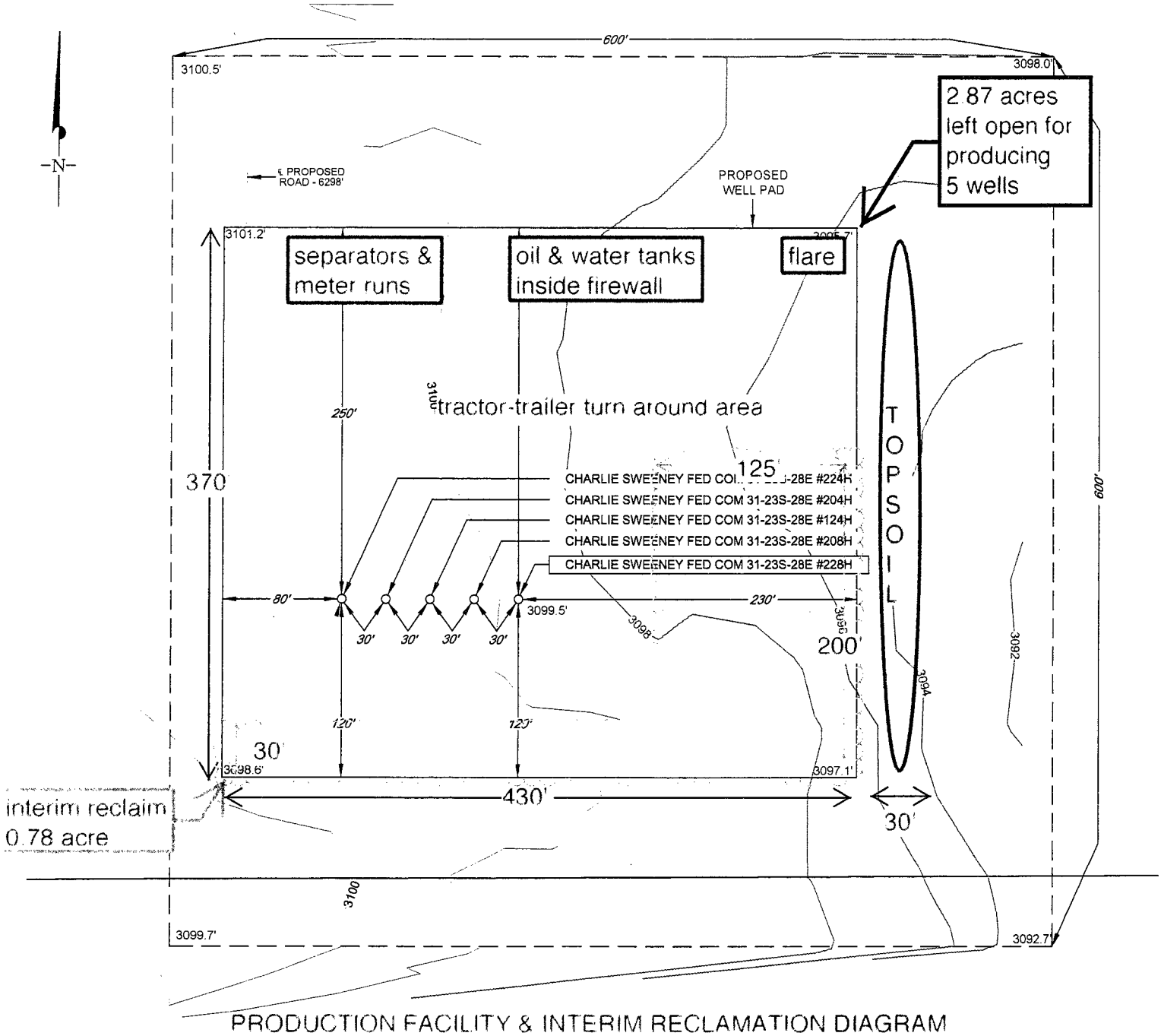
Matador Resources Company has a private surface owner agreement with Longwood Midstream Delaware LLC (5400 LBJ Freeway, Suite 1500, Dallas TX 75240) for their portion (Lot 2 31-23s-28e) of the water (Fast Line) pipeline.

12. OTHER INFORMATION

On site inspection was held with Trish Bad Bear (BLM) on December 10, 2015.

Lone Mountain submitted archaeology report NMCRIS-135215 on February 29, 2016 for the well site and will file a report for the associated infrastructure.

SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



PRODUCTION FACILITY & INTERIM RECLAMATION DIAGRAM

LEGEND

SECTION LINE
ARCH SITE
PROPOSED ROAD

LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #228H

#228H LATITUDE N 32.2546319 #228H LONGITUDE W 104.1195123

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.

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

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Operating Company
LEASE NO.:	NMNM121941
WELL NAME & NO.:	228H-Charlie Sweeney Fed Com
SURFACE HOLE FOOTAGE:	188'/S & 545'/E
BOTTOM HOLE FOOTAGE	240'/N & 330'/E
LOCATION:	Section 31, T. 23 S., R. 28 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.

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)

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 and all facilities 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 values 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 values, 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.

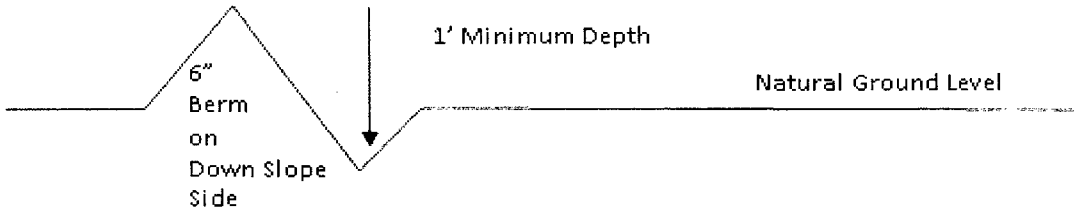
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

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

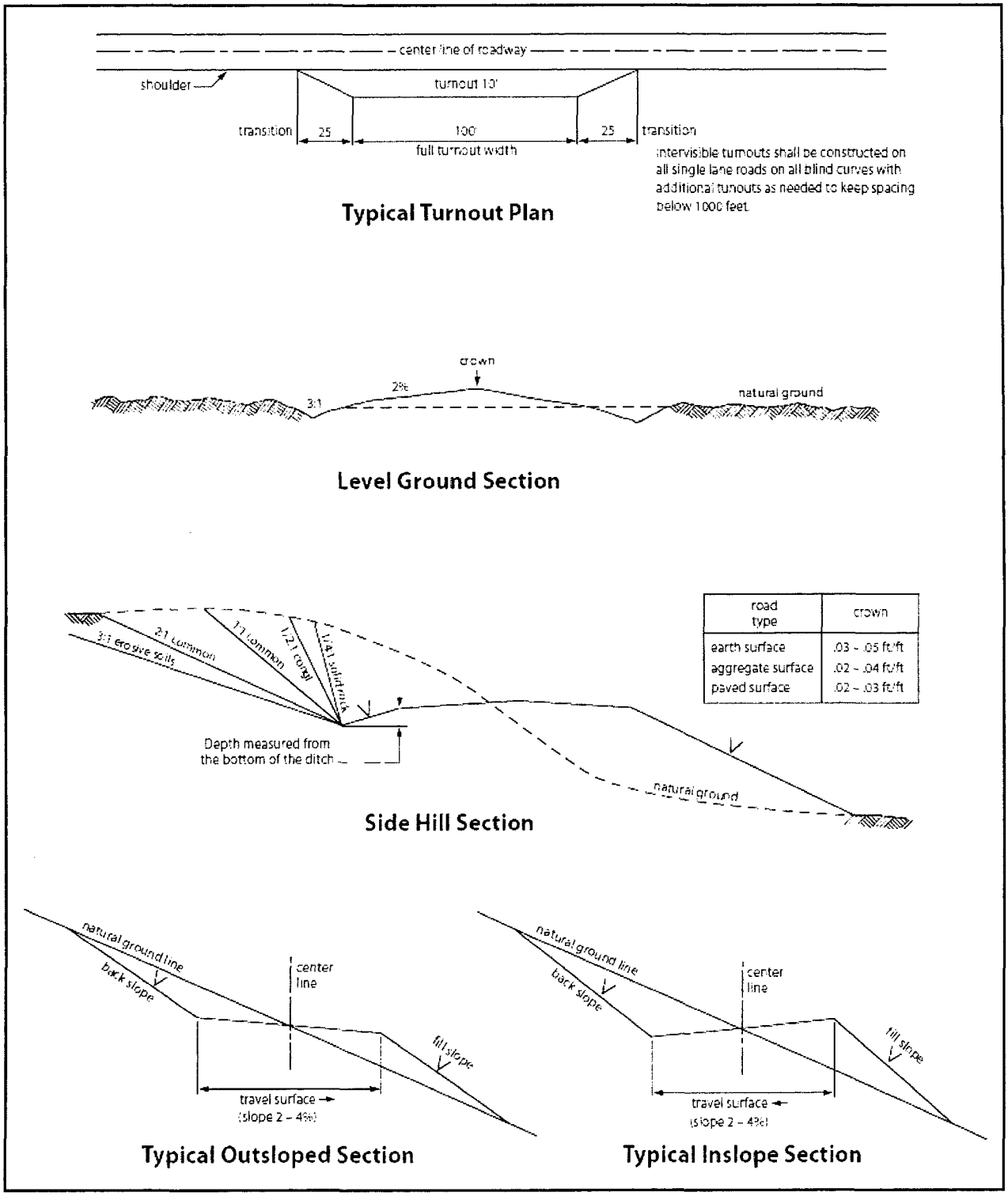


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. 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. PIPELINES

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.

(X) seed mixture 1	( ) seed mixture 3
() seed mixture 2	( ) seed mixture 4
( ) seed mixture 2/LPC	( ) Aplomado 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 SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review 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. 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. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard 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 in particular, 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. 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 activity of 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 provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;

b. Activities of other parties including, but not limited to:
   (1) Land clearing
   (2) Earth-disturbing and earth-moving work
   (3) Blasting
   (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, 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, salt water, 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/she 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 Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. 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.

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. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. 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. Signs will be maintained in a legible condition for the life of the pipeline.

14. 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. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. 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 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.

16. 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, powerline 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.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

C. ELECTRIC LINES

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.

VIII. 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).

IX. 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

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 shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall 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 shall 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). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may 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:

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Operating Company
LEASE NO.:	NMNM121941
WELL NAME & NO.:	228H-Charlie Sweeney Fed Com
SURFACE HOLE FOOTAGE:	188'/S & 545'/E
BOTTOM HOLE FOOTAGE	240'/N & 330'/E
LOCATION:	Section 31, T. 23 S., R. 28 E., NMPM
COUNTY:	Eddy County, New Mexico

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

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

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, report measured amounts and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **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) for Water Basin:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

Medium Cave/Karst
Possibility of water flows in the Castile and Salado.
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressures may be encountered upon penetrating the 3rd Bone Spring Sandstone and all subsequent formations.

1. The **13-3/8** inch surface casing shall be set at approximately **350** 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.

If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.

2. The minimum required fill of cement behind the **9-5/8** inch first intermediate casing, which shall be set at approximately **2450** feet, 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 **7** inch second intermediate casing, is:

   ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

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 **4-1/2** inch production casing is:

   ☒ Cement as proposed by operator. Operator shall provide method of verification. **Excess calculates to 21% - Additional cement may be required.**

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 53.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. 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

4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch first intermediate casing shoe shall be **3000 (3M)** psi.

5. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7** inch second intermediate casing shoe shall be **5000 (5M)** psi.

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

6. 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**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

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

F. WASTE MATERIAL AND FLUIDS

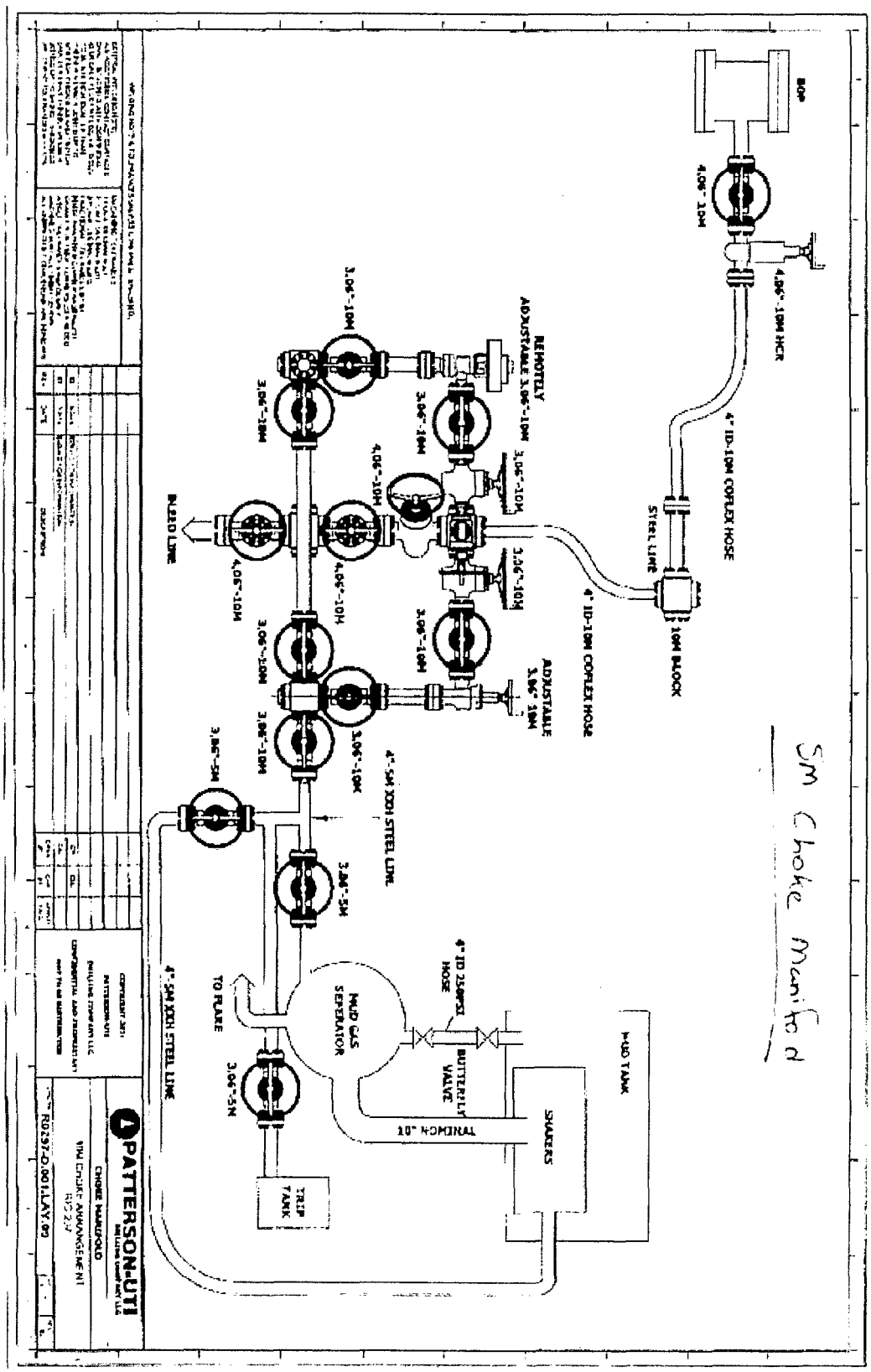
All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location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

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

G. SPECIAL REQUIREMENT (S)

Well Name:

Operator must submit a sundry to remove 'Com' from the well name.


5M Choke Manifold
BOP
4.06"-10M HCR
4" ID-10M COFLEX HOSE
STEEL LINE
10M BLOCK
4" ID-10M COFLEX HOSE
ADJUSTABLE 3.06"-10M
REMOTELY ADJUSTABLE 3.06"-10M
BLEED LINE
4" 5M XXH STEEL LINE
MUD GAS SEPERATOR
4" ID 25MPSI HOSE
BUTTERFLY VALVE
10" NOMINAL
SHAKERS
MUD TANK
TRIP TANK
TO FLARE
4" 5M XXH STEEL LINE
PATTERSON-UTI
CHOKE MANIFOLD
RIG 297