

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

5a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SHL: NMNM-121941 BHL: fee
5b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator MATADOR PRODUCTION COMPANY (228937)		7. If Unit or CA Agreement, Name and No. will comm. w/fee lease
3a. Address 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240		8. Lease Name and Well No. Charlie Sweeney Fed Com #203H (316071)
3b. Phone No. (include area code) 972-371-5241		9. API Well No. 30-015- 44027
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 190' FSL & 2250' FEL At proposed prod. zone 240' FNL & 2310' FEL		10. Field and Pool, or Exploratory WILDCAT; WOLFCAMP Y (96794)
14. Distance in miles and direction from nearest town or post office* 2 AIR MILES SW OF LOCING, NM		11. Sec., T. R. M. or Blk. and Survey of Area SWSE 31-23S-28E NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL:190' 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 123) BHL:330'(ditto)	19. Proposed Depth TVD:9532' MD:14300'	20. BLM/BIA Bond No. on file BLM NMB-001079
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3108' UNGRADED	22. Approximate date work will start* 10/01/2016	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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 P. Layton	Date 12/22/16
-----------------------------	--	------------------

Title FCR FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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)

*(Instructions on page 2)

APPROVAL FOR TWO YEARS

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 03 2017 RW+RB
5-10-17

RECEIVED

Matador Production Company

SURFACE PLAN PAGE 5

Charlie Sweeney Fed Com 31-23S-28E 203H

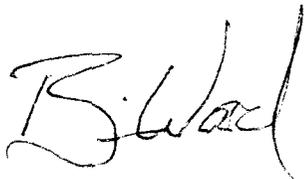
SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.

BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.

Eddy County, NM

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 10th 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 10, 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 203H 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.

A handwritten signature in black ink, appearing to read "Brian Wood". The signature is stylized with a large, looped initial "B" and a long, sweeping underline.

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 30-015- 44027	² Pool Code 96794	³ Pool Name WILDCAT; WOLFCAMP Y
⁴ Property Code 316071	⁵ Property Name CHARLIE SWEENEY FED COM	
⁶ Well Number #203H	⁷ Operator Name MATADOR PRODUCTION COMPANY	
⁸ OGRID No. 228937	⁹ Elevation 3108'	

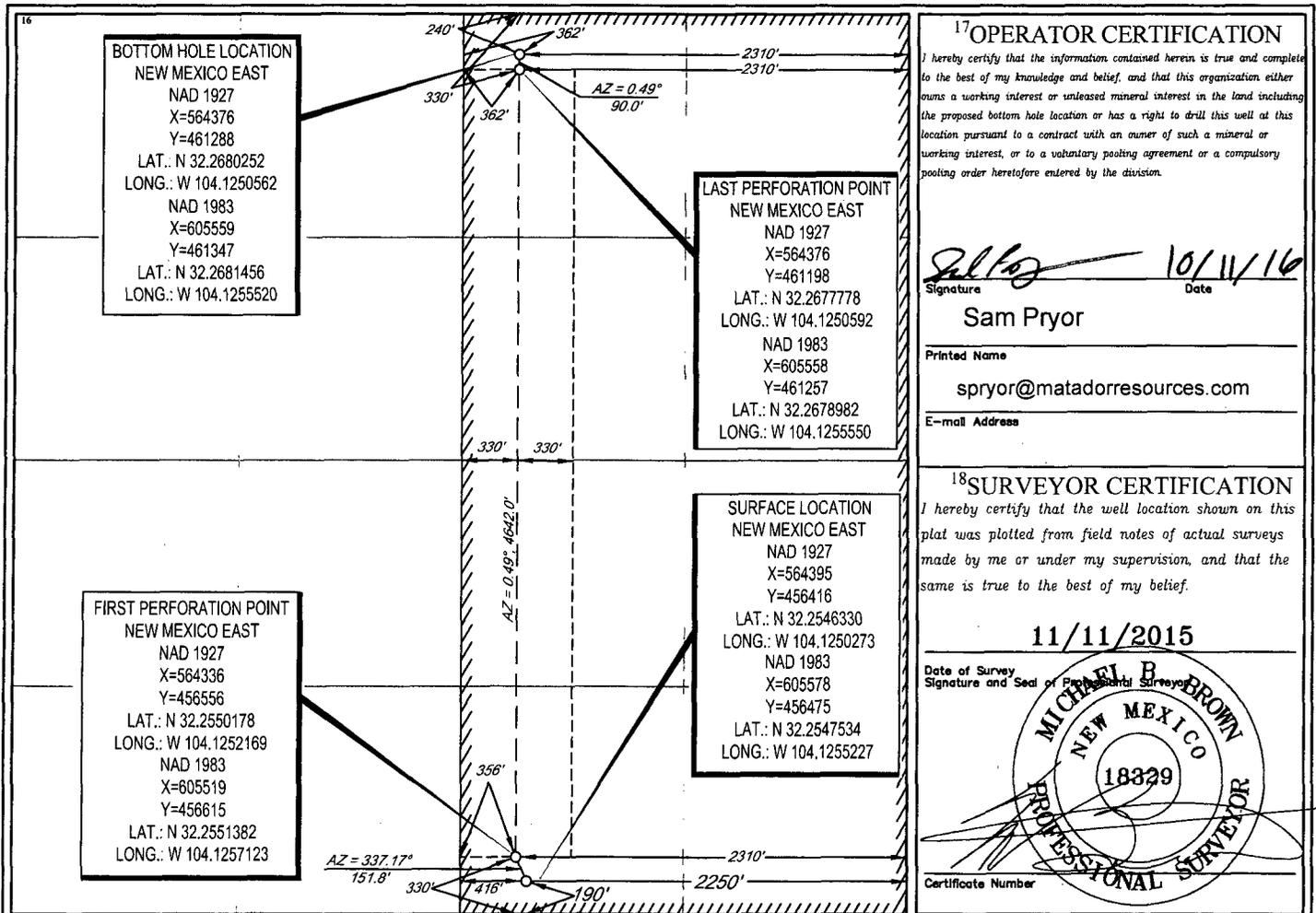
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	31	23-S	28-E	-	190'	SOUTH	2250'	EAST	EDDY

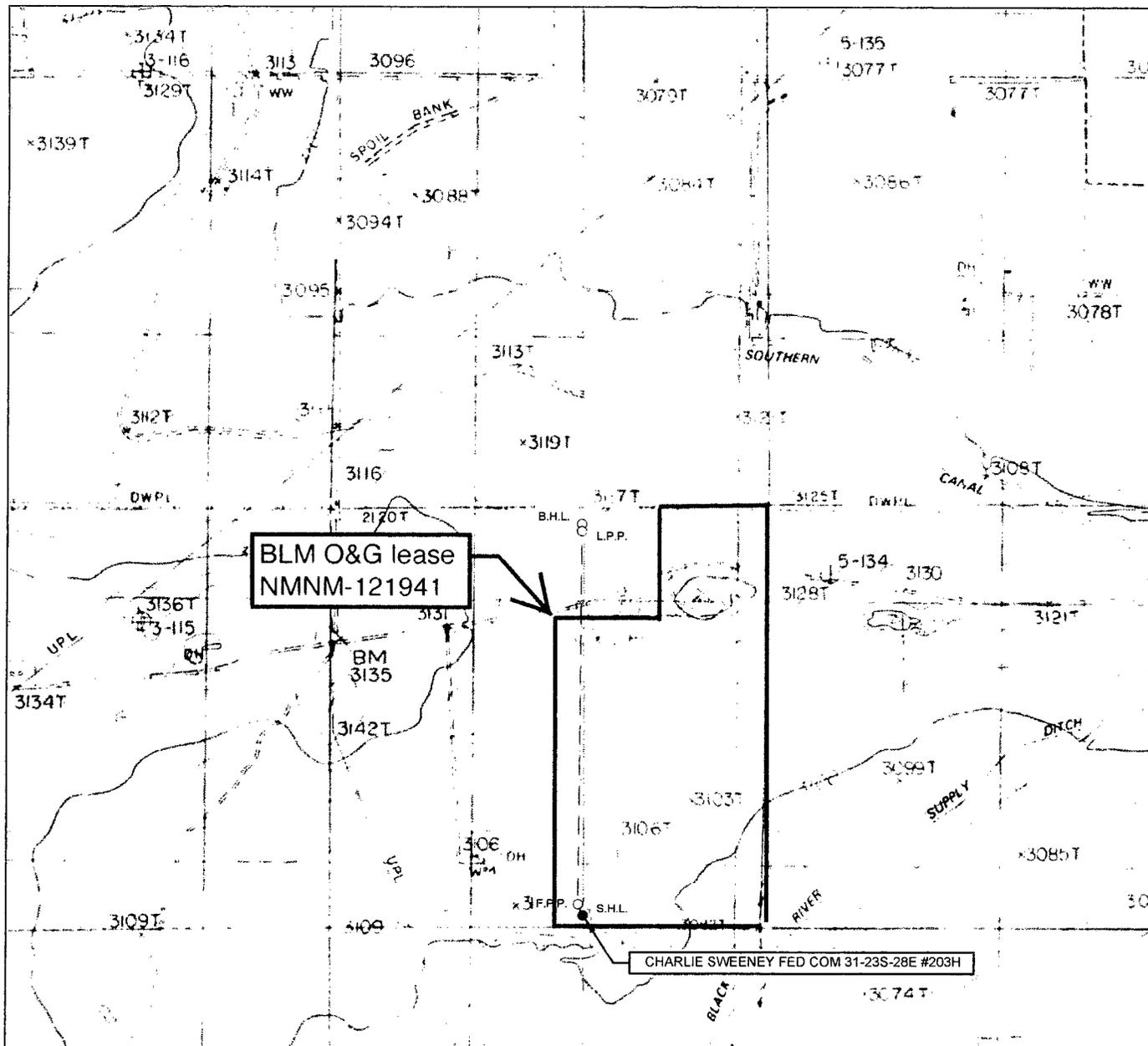
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	31	23-S	28-E	-	240'	NORTH	2310'	EAST	EDDY

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



LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #203H

SECTION 31 TWP 23-S RGE 28-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3108'
 DESCRIPTION 190' FSL & 2250' FEL

LATITUDE N 32.2546330 LONGITUDE W 104.1250273



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.

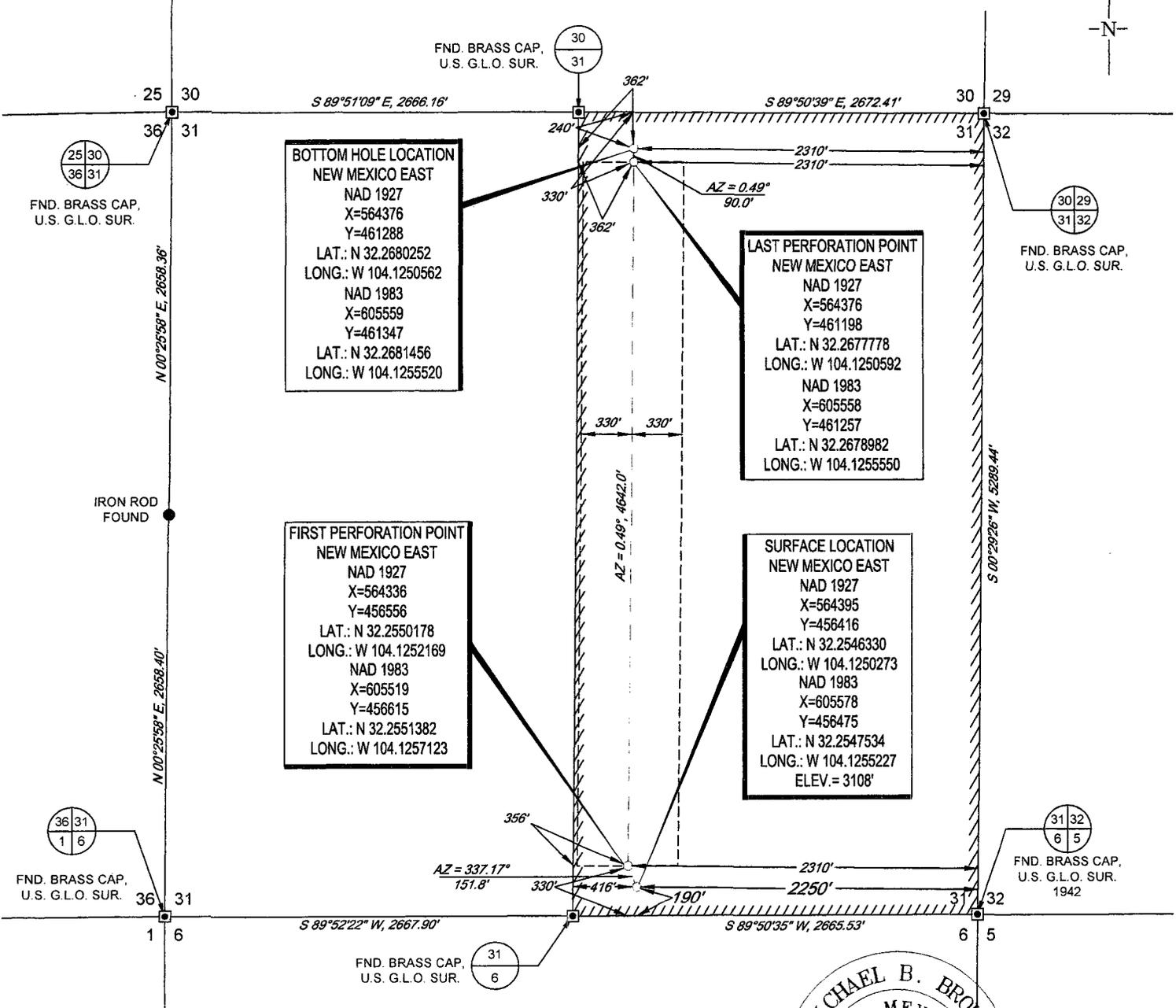


1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

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

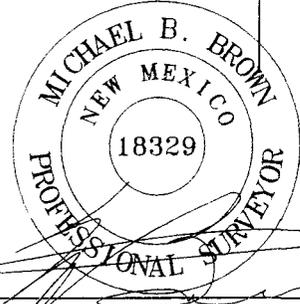


SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #203H
 SECTION 31 TWP 23-S RGE 28-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM
 DESCRIPTION 190' FSL & 2250' 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 LEASE RD. ±0.7 MILES TO A POINT
 ±615 FEET NORTH OF THE LOCATION.



Michael Blake Brown, P.S. No. 18329
 DECEMBER 29, 2015

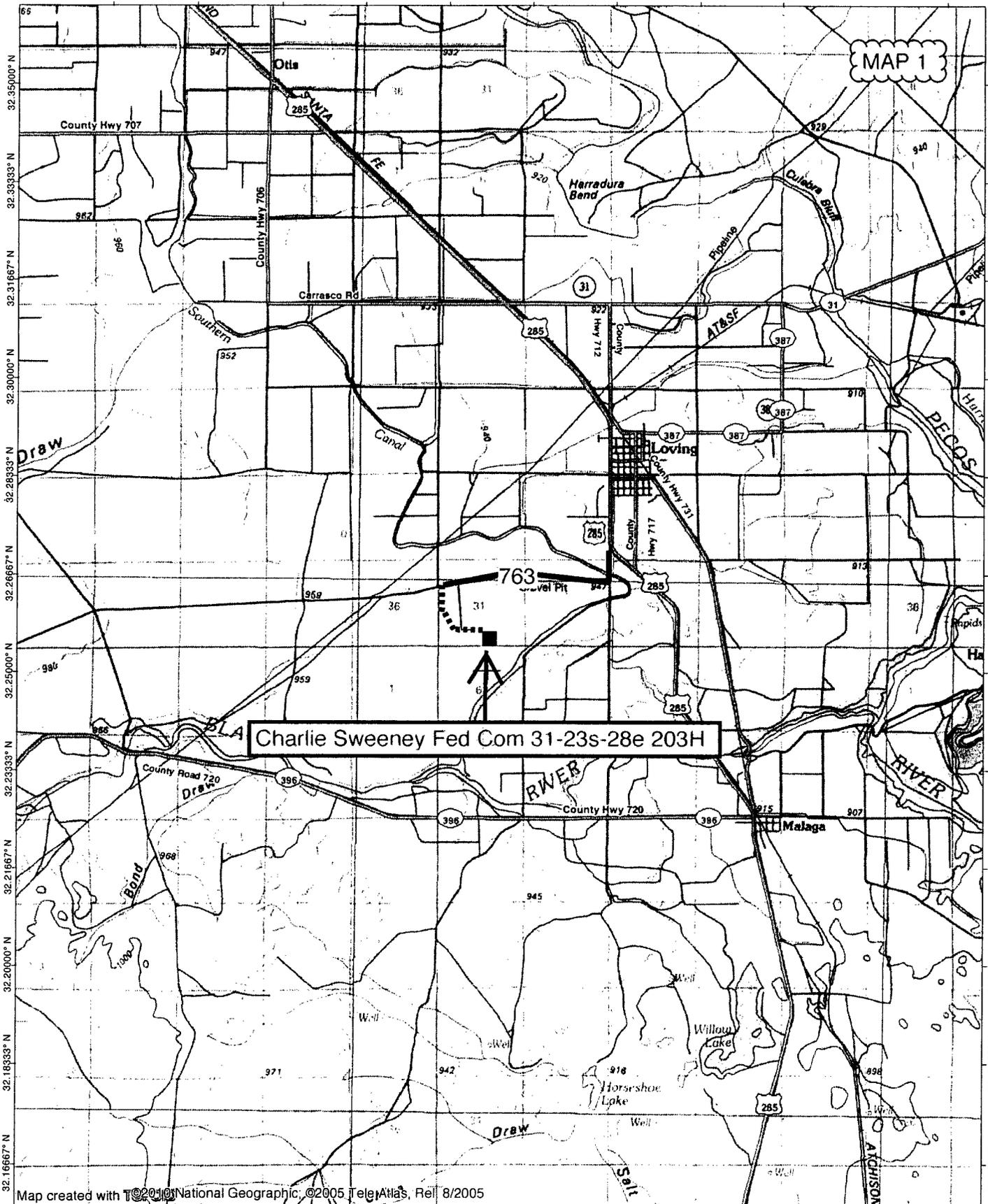
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
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 NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

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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

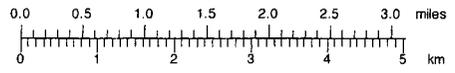


Charlie Sweeney Fed Com 31-23s-28e 203H

MAP 1

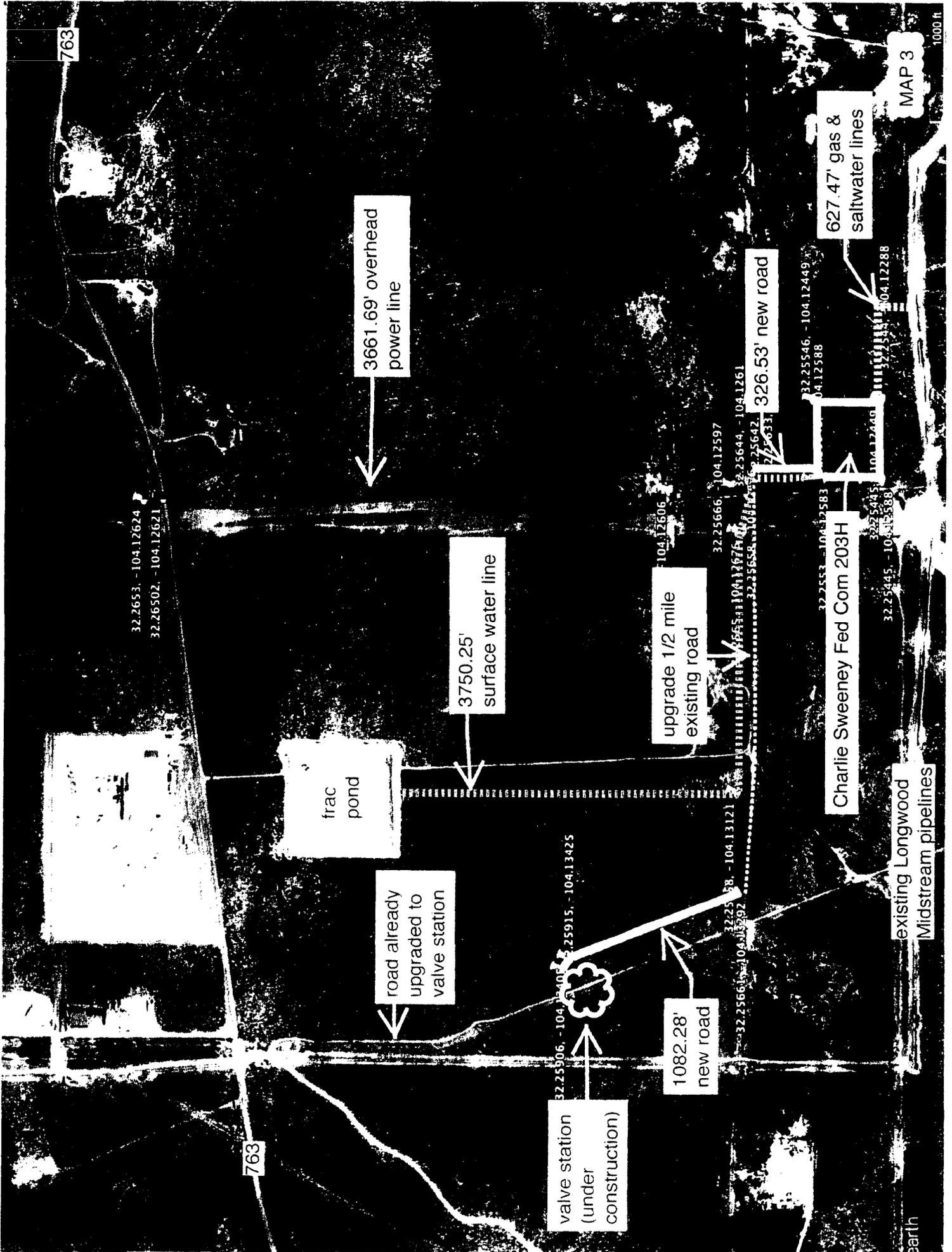
Map created with TOPO! National Geographic, ©2005 TeleAtlas, Rel 8/2005

NATIONAL GEOGRAPHIC



TN-MN

7.5°



763

32.2653, -104.12624
32.26502, -104.12621

3661.69' overhead power line

frac pond

3750.25' surface water line

road already upgraded to valve station

valve station (under construction)

32.25915, -104.13425

1082.28' new road

upgrade 1/2 mile existing road

104.12606

32.25666, -104.12597

32.25644, -104.1261

326.53' new road

32.25546, -104.12449

32.25588, -104.12588

627.47' gas & saltwater lines

104.12449

104.12288

Charlie Sweeney Fed Com 203H

32.25445, -104.12588

existing Longwood Midstream pipelines

MAP 3

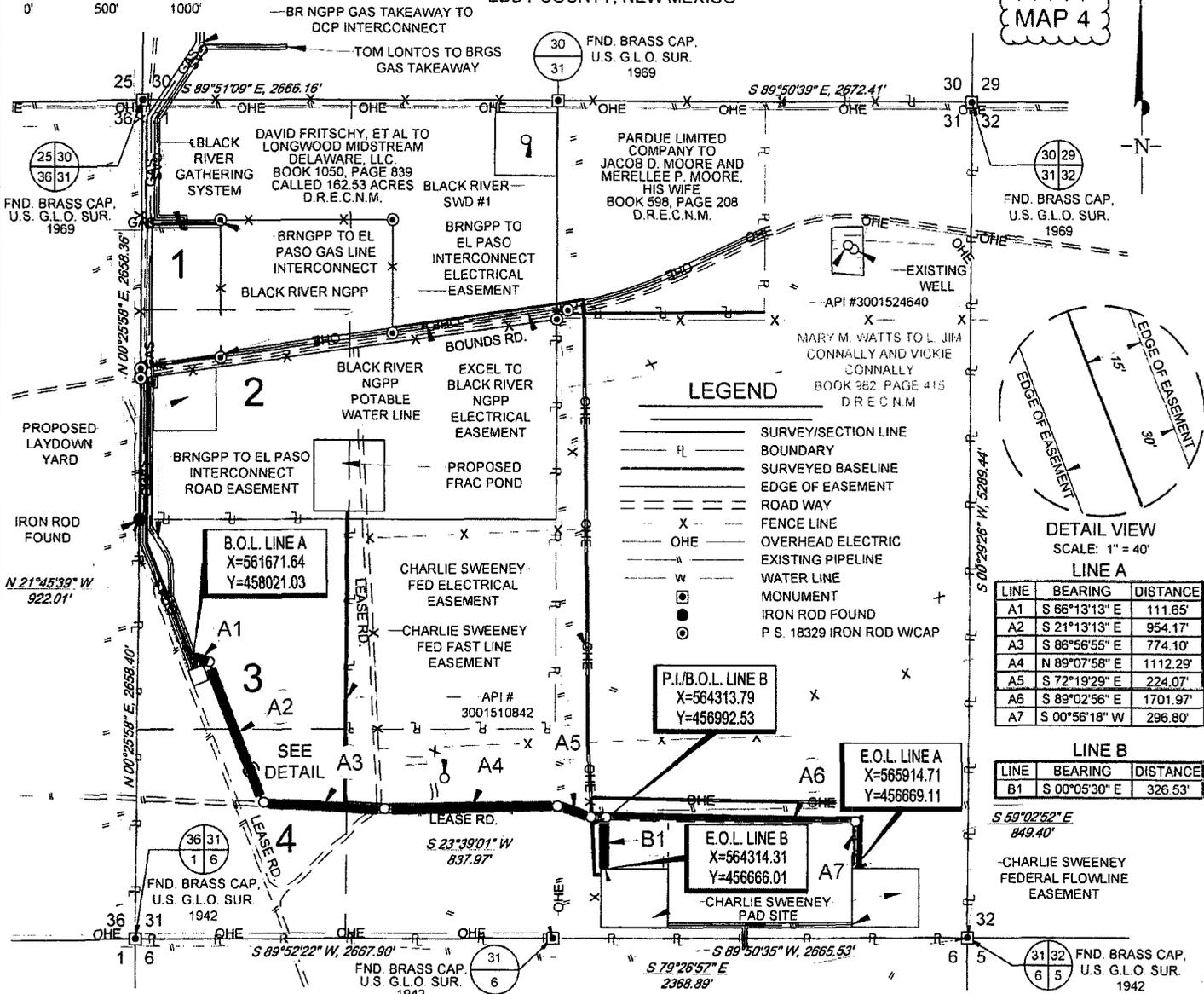
earth

1000 ft

SCALE: 1" = 1000'

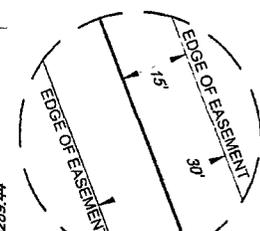
SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 4



LEGEND

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



DETAIL VIEW
SCALE: 1" = 40'

LINE A

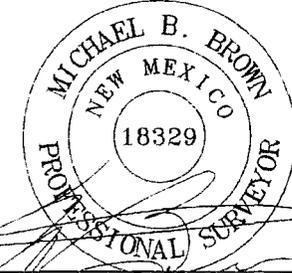
LINE	BEARING	DISTANCE
A1	S 66°13'13" E	111.65'
A2	S 21°13'13" E	954.17'
A3	S 86°56'55" E	774.10'
A4	N 89°07'58" E	1112.29'
A5	S 72°19'29" E	224.07'
A6	S 89°02'56" E	1701.97'
A7	S 00°56'18" W	296.80'

LINE B

LINE	BEARING	DISTANCE
B1	S 00°05'30" E	326.53'

CHARLIE SWEENEY FED ROAD EASEMENT

Being a proposed road easement being 30 feet in width, 15 feet left, and 15 feet right of the above platted centerline total line footage containing 5501.58 feet or 333.43 rods, containing 3.79 acres more or less.



Michael Blake Brown, P.S. No. 18329
SEPTEMBER 1, 2016



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
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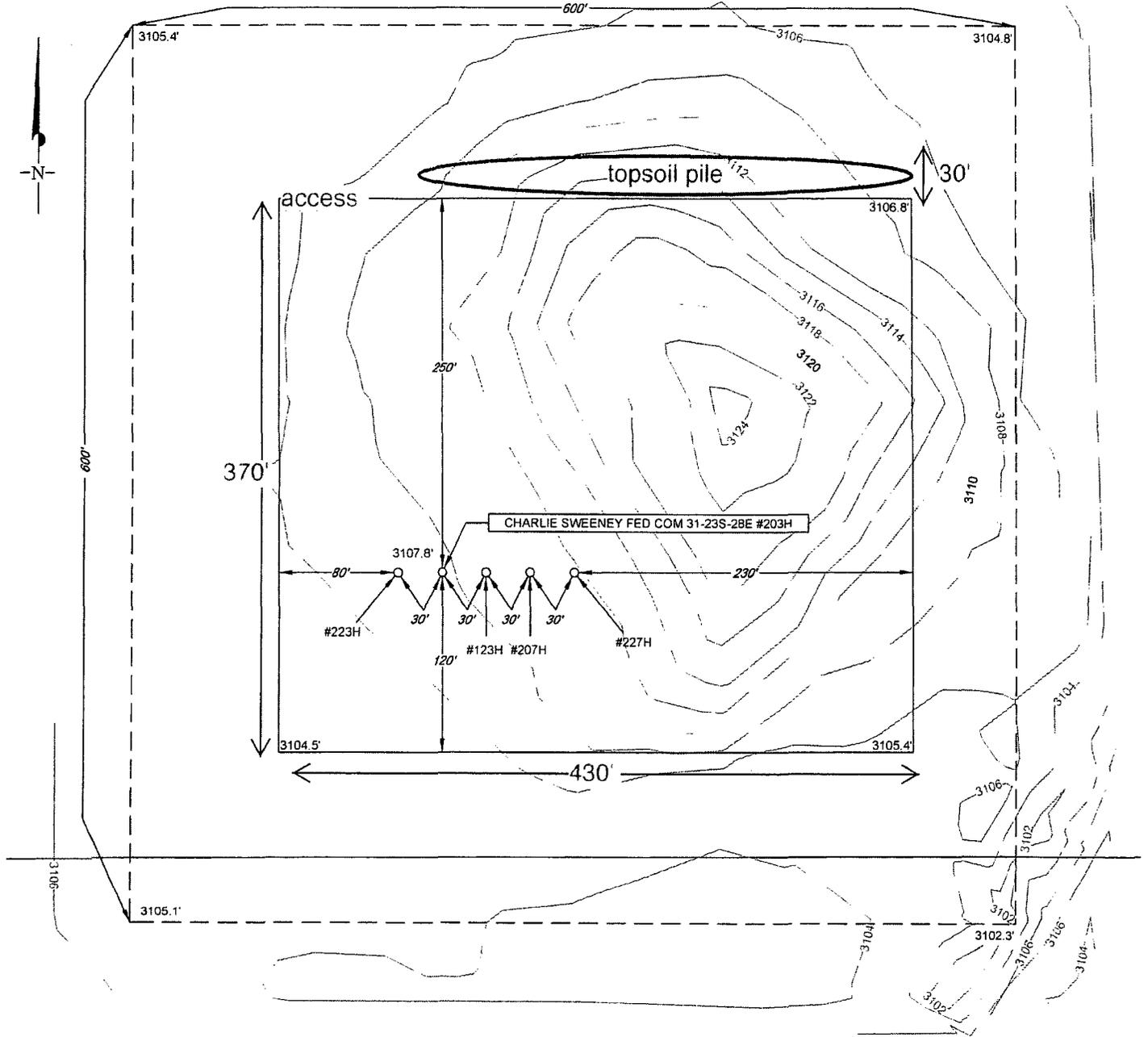
CHARLIE SWEENEY FED ROAD EASEMENT	REVISION:	
	MML	06/30/16
DATE: 06/20/16	R.M.	08/24/16
FILE: EP CHARLIE_SWEENEY_FED_ROAD_EASEMENT_REVS	GJU	09/01/16
DRAWN BY: MML		
SHEET: 1 OF 1		

- 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



MAP 5

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



LEGEND

SECTION LINE

LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #203H

#203H LATITUDE N 32.2546330 #203H LONGITUDE W 104.1250273

SCALE: 1" = 100'



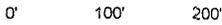
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION 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.

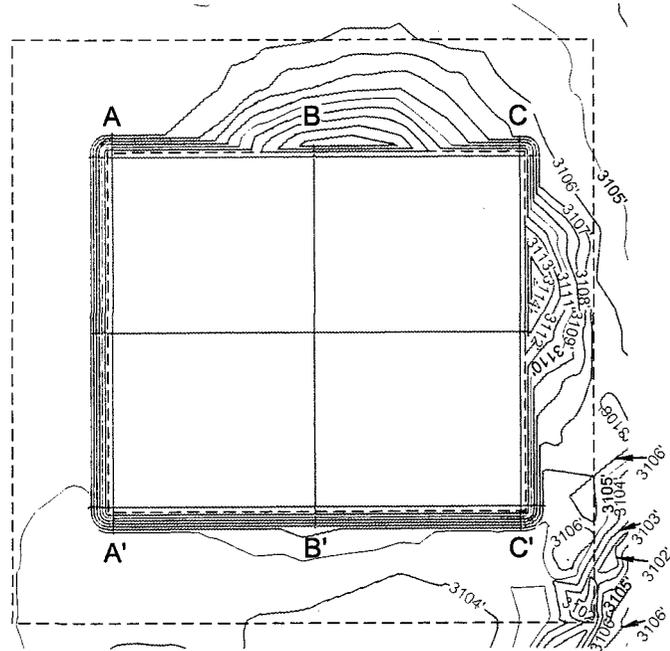
ORIGINAL DOCUMENT SIZE: 8.5" X 11"

SCALE: 1" = 200'



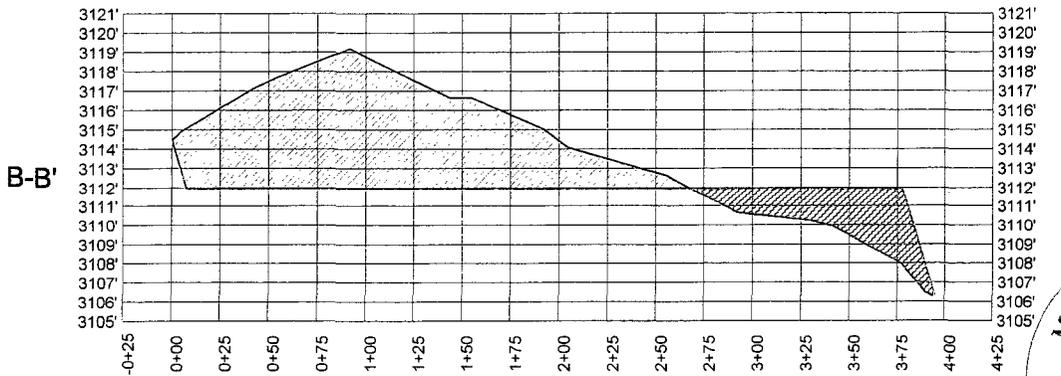
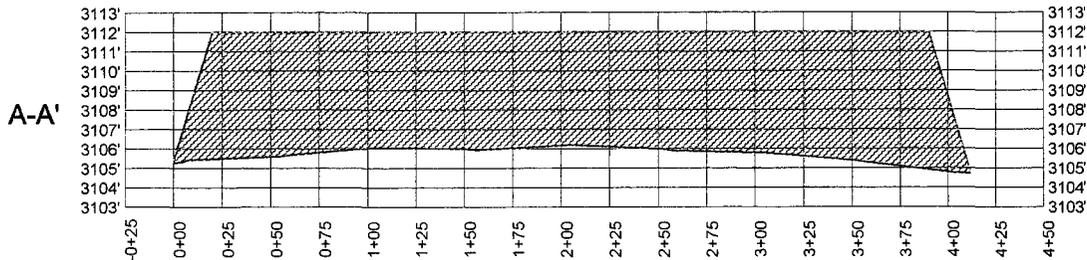
SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 6



TOP OF PAD ELEVATION: 3111.9429
 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

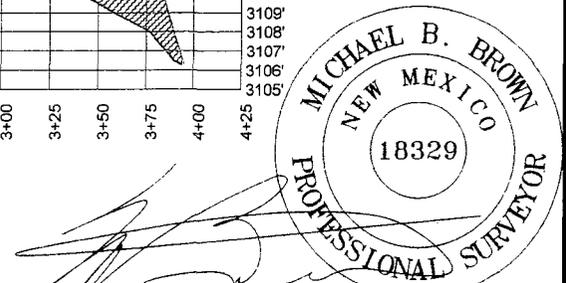
PAD EARTHWORK VOLUMES
 CUT: 384,007.9 C.F., 14,222.51 C.Y.
 FILL: 384,008.1 C.F., 14,222.52 C.Y.
 BALANCE IMPORT: 0.2 C.F., 0.01 C.Y.
 AREA: 183694.3 SQ. FT., 4.217 ACRES



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



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 25, 2016

Field note description of even date accompanies this plat.

CHARLIE SWEENEY FED
 COM 31-23S-28E #223H
 SURFACE PAD SITE PRO

REVISION:

INT	DATE

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 RESOURCE COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.

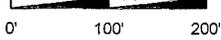
DATE: 01/25/16

FILE: 00 CHARLIE SWEENEY FED COM 31-23S-28E #223H SURFACE PAD SITE PRO

DRAWN BY: GLH

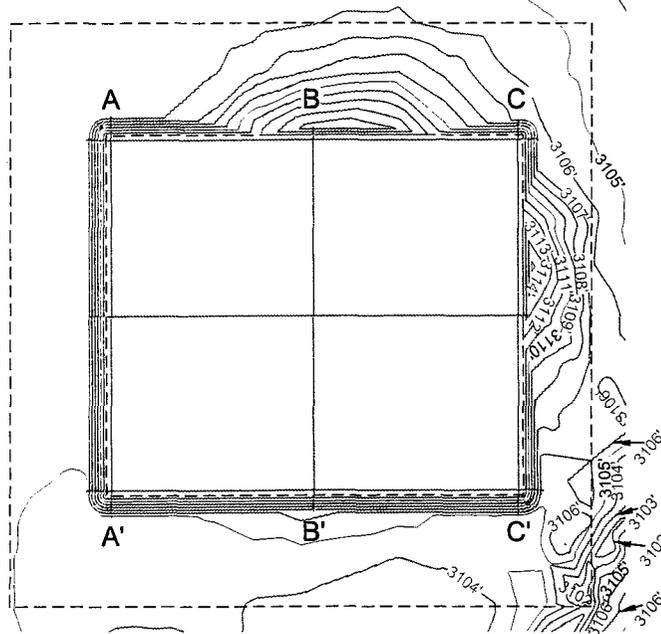
SHEET: 1 OF 2

SCALE: 1" = 200'



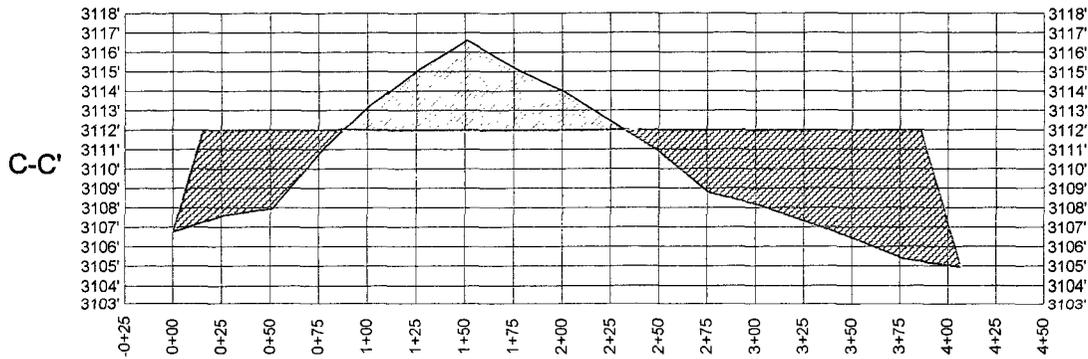
SECTION 31, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 7



TOP OF PAD ELEVATION: 3111.9429
 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

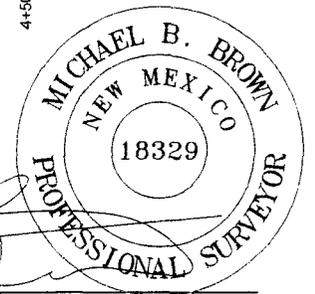
PAD EARTHWORK VOLUMES
 CUT: 384,007.9 C.F., 14,222.51 C.Y.
 FILL: 384,008.1 C.F., 14,222.52 C.Y.
 BALANCE IMPORT: 0.2 C.F., 0.01 C.Y.
 AREA: 183694.3 SQ.FT., 4.217 ACRES



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



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 25, 2016

Field note description of even date accompanies this plat.

CHARLIE SWEENEY FED COM 31-23S-28E #223H SURFACE PAD SITE PRO	REVISION:	
	INT	DATE
DATE: 01/25/16		
FILE: [unclear]		
DRAWN BY: GLH		
SHEET: 2 OF 2		

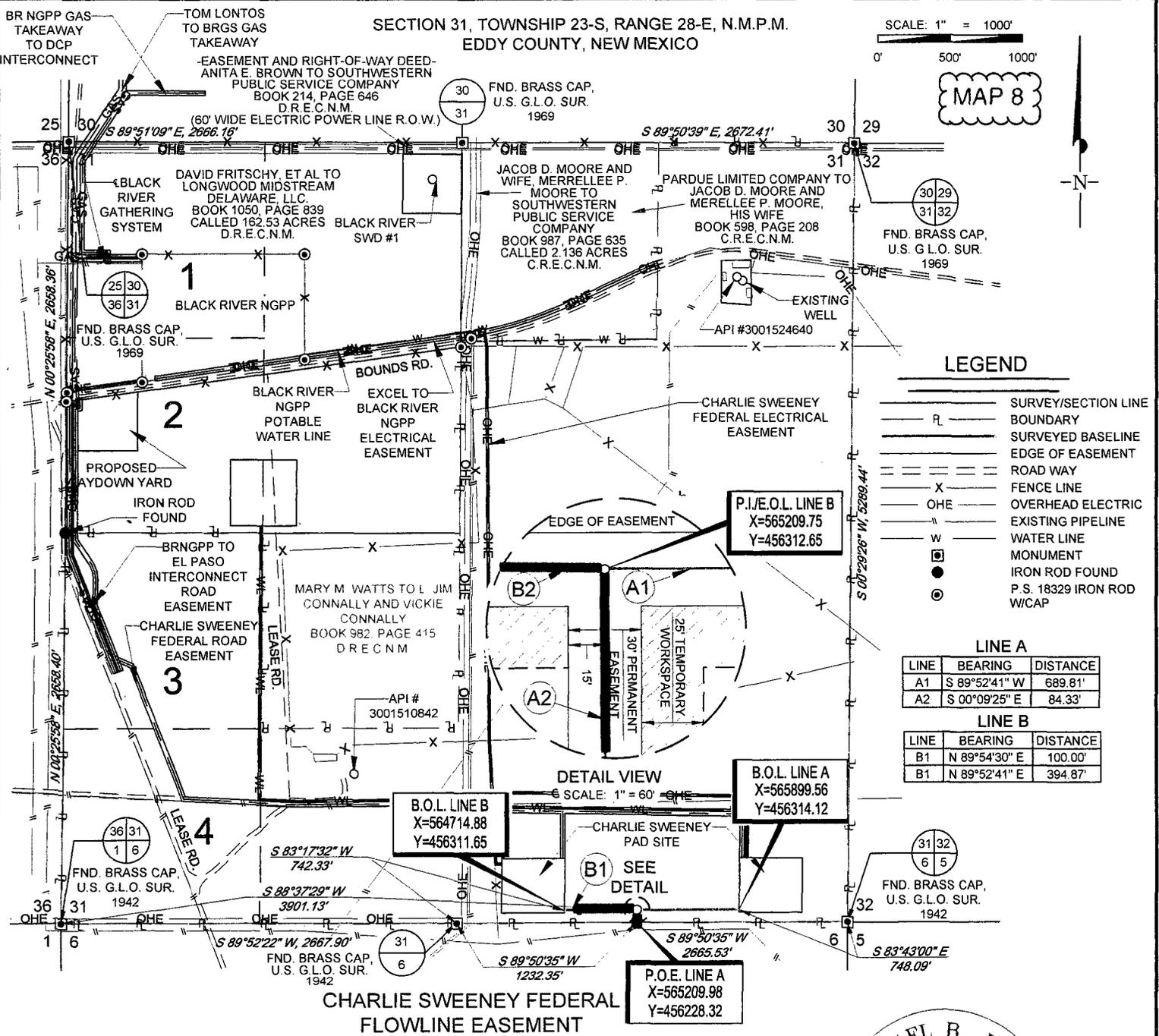
NOTES:

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

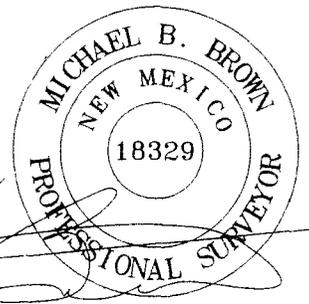
SCALE: 1" = 1000'

MAP 8



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.



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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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JUNE 20, 2016

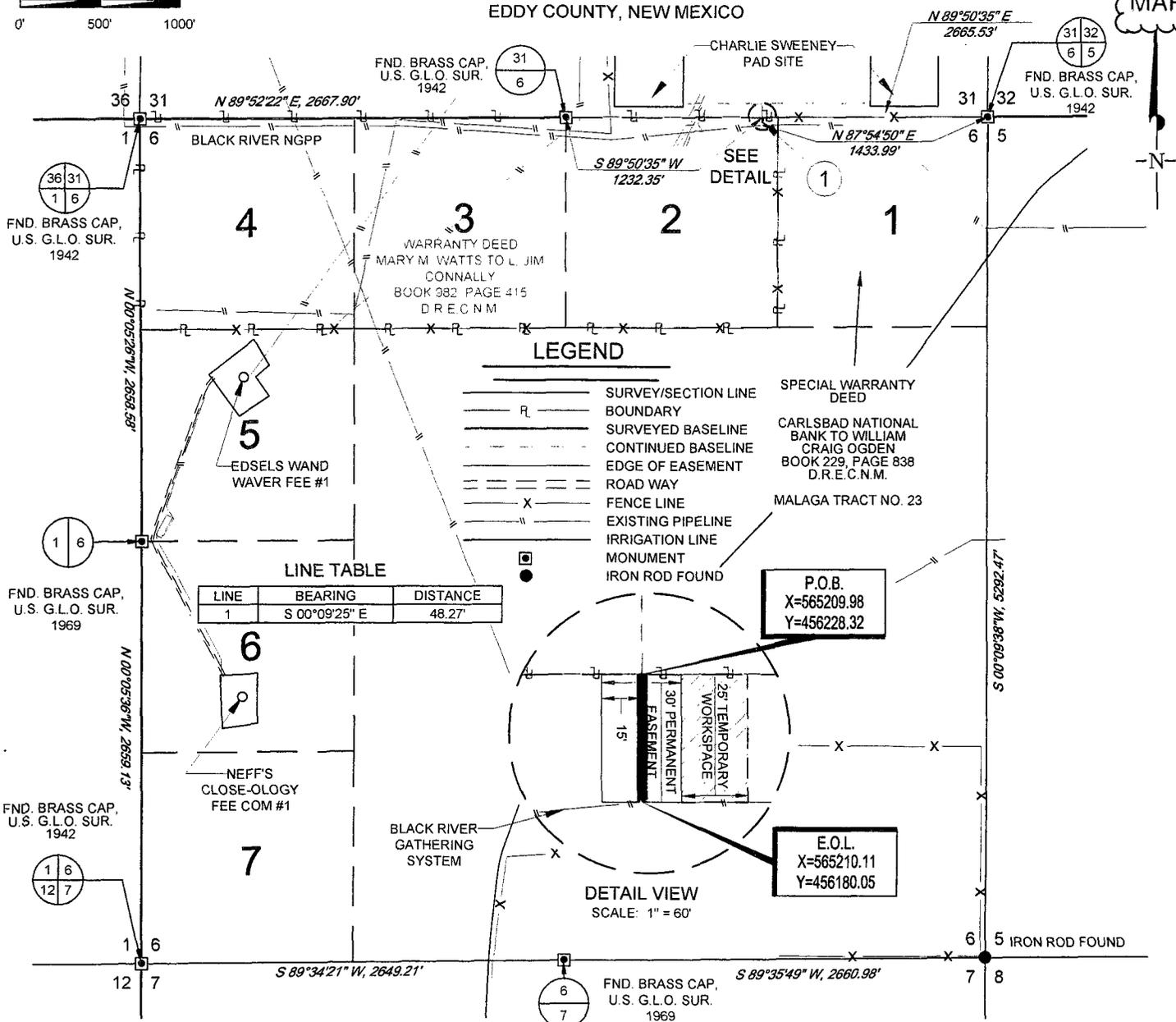
CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT	REVISION:	
	GJU	06/20/16
DATE:	12/15/15	
FILE:	EP CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT SEC 31 REV1	
DRAWN BY:	GLH	
SHEET:	1 OF 1	

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

SCALE: 1" = 1000'

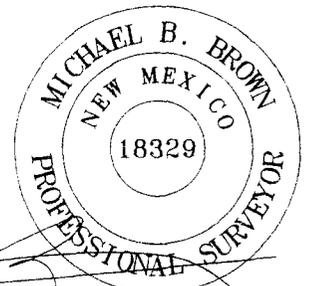
SECTION 6, TOWNSHIP 24-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MAP 9



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 Blake Brown, P.S. No. 18329

JUNE 20, 2016



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CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT	
DATE:	06/20/16
FILE:	EP CHARLIE SWEENEY FEDERAL FLOWLINE EASEMENT SEC 6
DRAWN BY:	GJU
SHEET:	1 OF 1

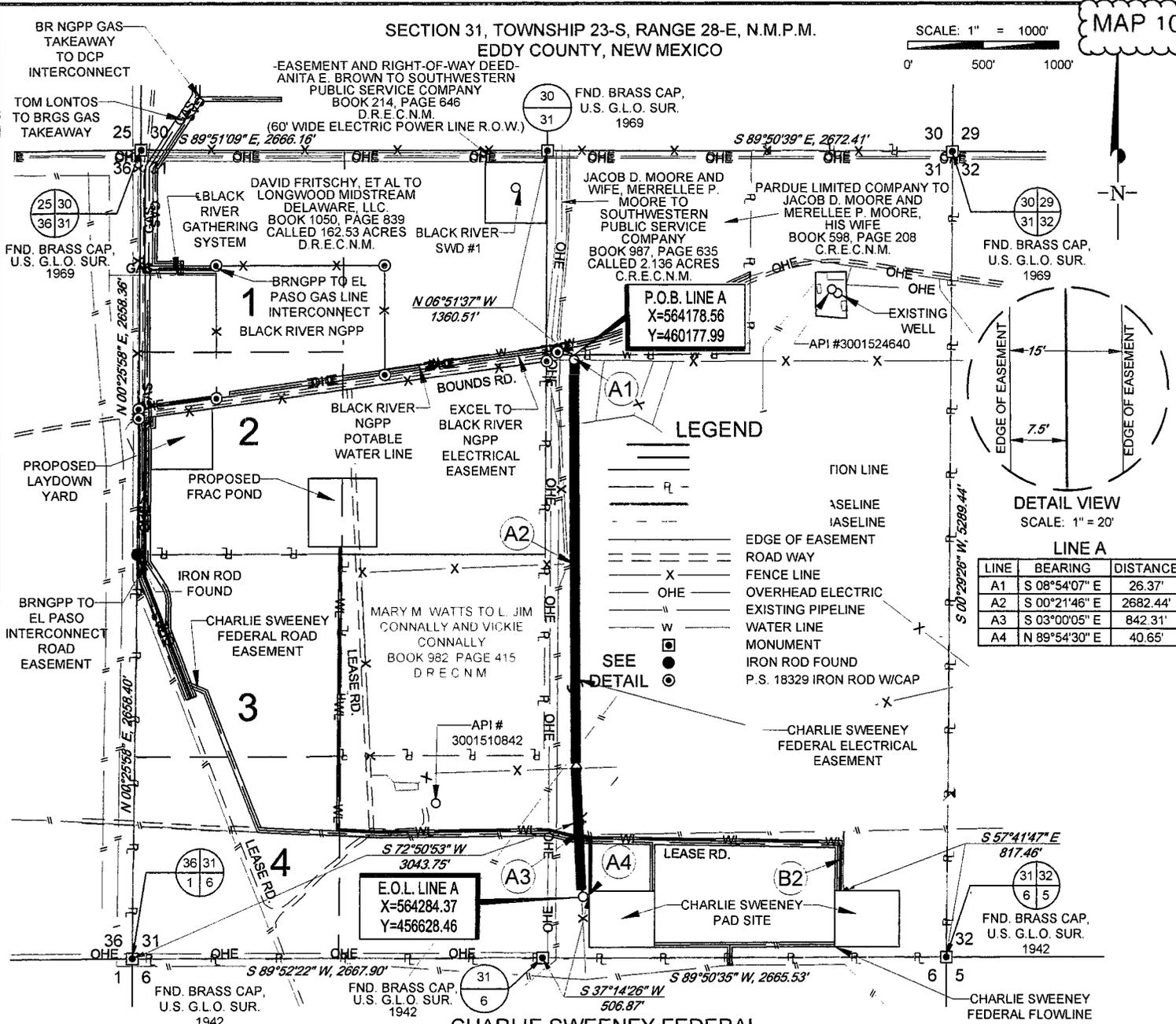
REVISION:

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 5. E.O.L. = END OF LINE
 6. D.R.E.C.N.M. = DEED RECORDS EDDY COUNTY NEW MEXICO

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

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

MAP 10

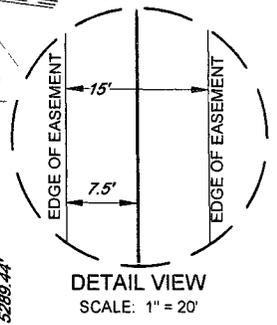


P.O.B. LINE A
X=564178.56
Y=460177.99

E.O.L. LINE A
X=564284.37
Y=456628.46

LEGEND

- PION LINE
- BASELINE
- IASELINE
- EDGE OF EASEMENT
- ROAD WAY
- FENCE LINE
- OHE OVERHEAD ELECTRIC
- EXISTING PIPELINE
- WATER LINE
- MONUMENT
- IRON ROD FOUND
- P.S. 18329 IRON ROD W/CAP

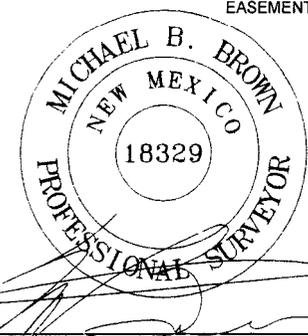


LINE A

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'

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!



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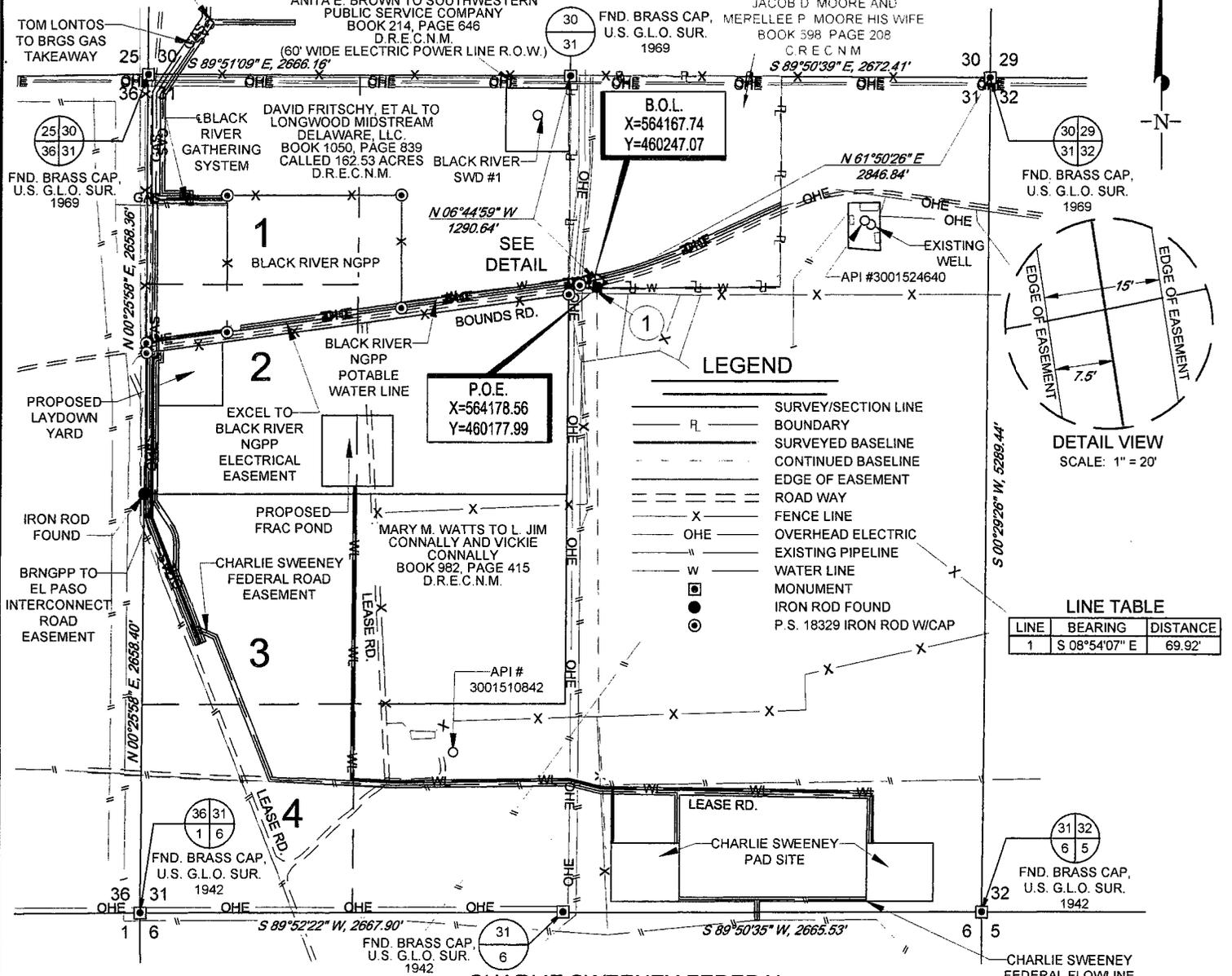
Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

CHARLIE SWEENEY FEDERAL ELECTRIC EASEMENT	REVISION:	NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927. 3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR PRODUCTION 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 8. C.R.E.C.N.M. = COUNTY RECORDS EDDY COUNTY NEW MEXICO
	DATE: 06/20/16	
	FILE: EP CHARLIE SWEENEY FEDERAL ELECTRICAL LINE EASEMENT CONNALLY	
	DRAWN BY: GJU	
SHEET: 1 OF 1		

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

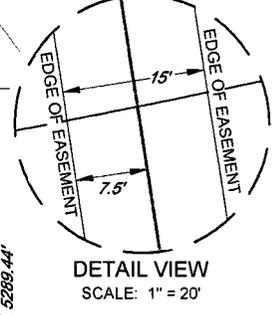
SCALE: 1" = 1000'
0' 500' 1000'

MAP 11



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



LINE TABLE

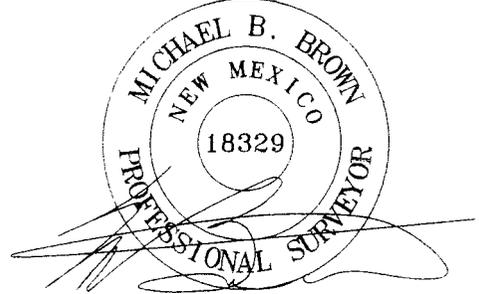
LINE	BEARING	DISTANCE
1	S 08°54'07" E	69.92'

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.



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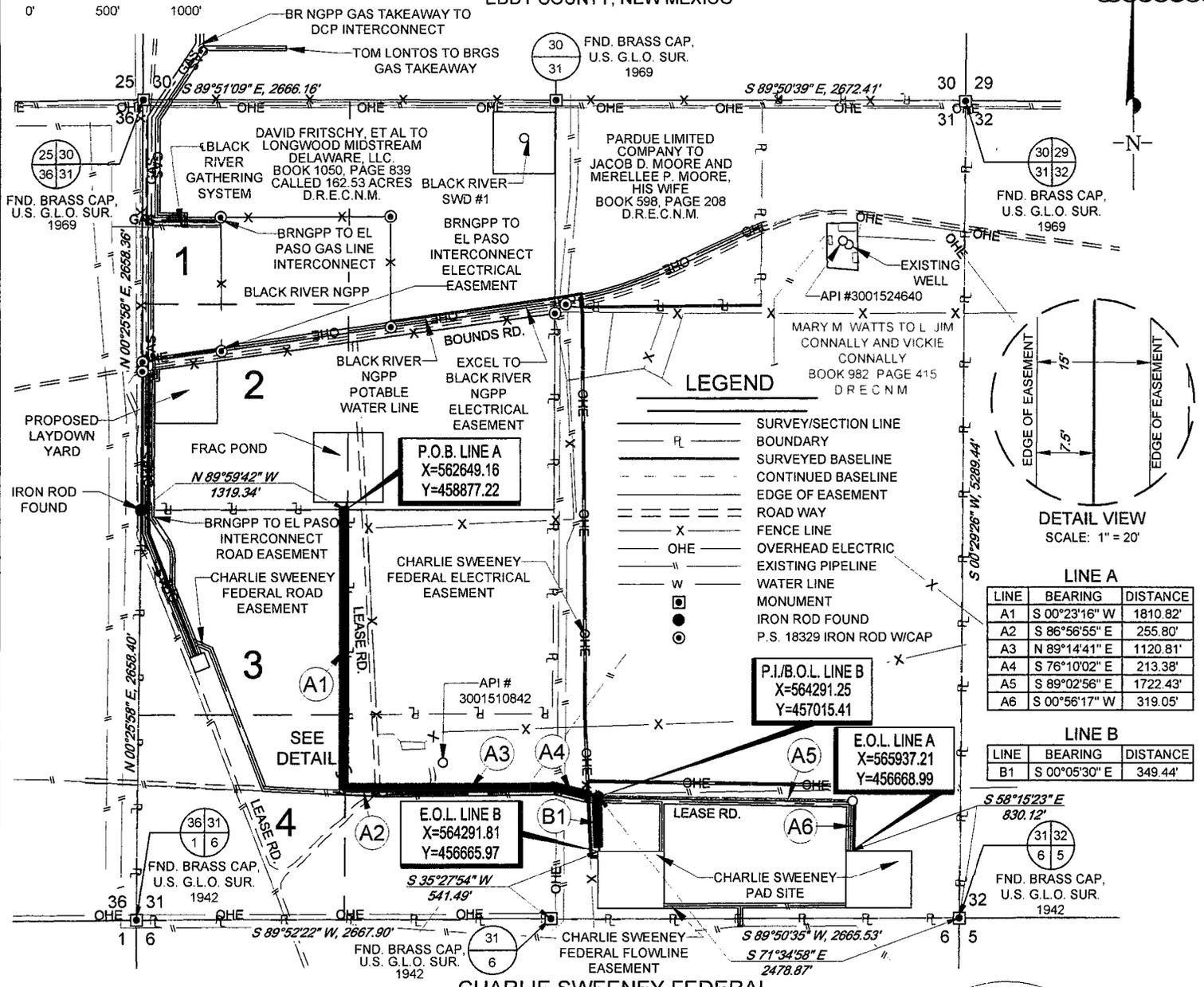
Michael Blake Brown, P.S. No. 18329
JUNE 20, 2016

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

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

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

SCALE: 1" = 1000'



LEGEND

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

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°58'17" W	319.05'

LINE B

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

P.O.B. LINE A
X=562649.16
Y=458877.22

P.I./B.O.L. LINE B
X=564291.25
Y=457015.41

E.O.L. LINE A
X=565937.21
Y=456668.99

E.O.L. LINE B
X=564291.81
Y=456665.97

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.



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



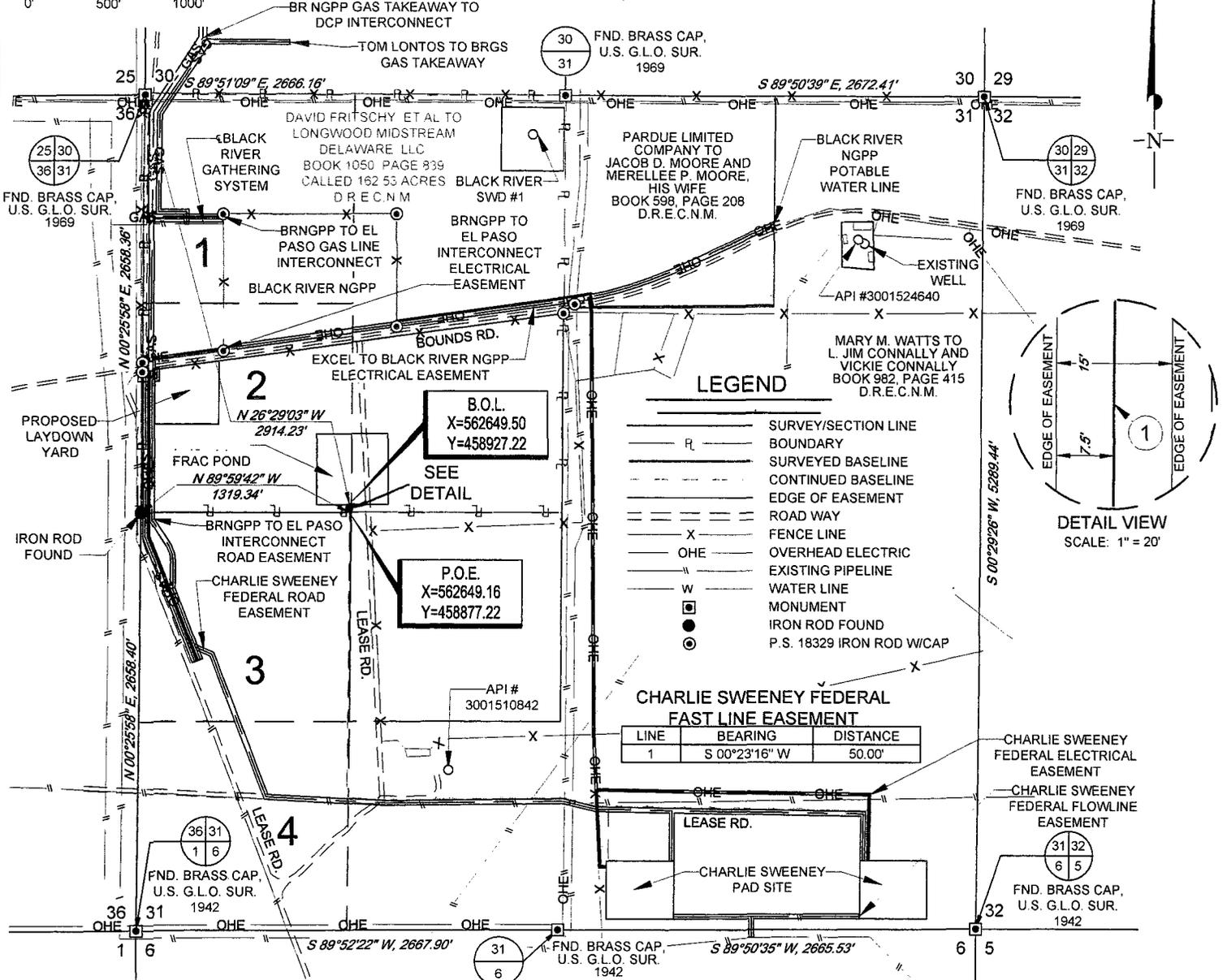
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CHARLIE SWEENEY FEDERAL FAST LINE EASEMENT	
DATE:	06/20/16
FILE:	FP_CHARLIE_SWEENEY_FEDERAL_FAST_LINE_EASEMENT_CONNALLY
DRAWN BY:	MML
SHEET:	1 OF 1

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

SCALE: 1" = 1000'



LEGEND

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

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 Blake Brown, P.S. No. 18329

JUNE 20, 2016



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

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Matador Production Company
Charlie Sweeney Fed Com 203H
SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 2310' 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
3 rd Bone Spring Carbonate	7947	Hydrocarbon
3 rd Bone Spring Sand	9032	Hydrocarbon
Wolfcamp	9357	Hydrocarbon
Wolfcamp X	9387	Hydrocarbon
Wolfcamp Y	9487	Hydrocarbon (& Target Formation)
TVD (Wolfcamp Y)	9532	Hydrocarbon
MD (Wolfcamp Y)	14300	Hydrocarbon

2. NOTABLE ZONES

Closest water well (C 02022/02955/03218) is 1,617' to the northwest. Depth of well and depth to water have not been reported to the State. Proposed depth was 190'. Closest (≈5,000' 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 attachments for BOP and choke manifold diagrams.

Matador Production Company
Charlie Sweeney Fed Com 203H
SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.
Eddy County, NM

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

4. CASING & CEMENT

Hole will extend north of the drilling window to allow for pump installation. All perforations will be $\geq 330'$ 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"	9700'	7"	New	29	P-110	BTC	1.125	1.125	1.8

Matador Production Company
Charlie Sweeney Fed Com 203H
SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.
Eddy County, NM

DRILL PLAN PAGE 3

6.125"	14300'	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	530	2.13	1128.9	12.6	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	300	1.38	414	14.8	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 1500'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th 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 = 9200'		25% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of curve	

5. MUD PROGRAM

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

Name	Hole Size	Mud Weight	Visc	Fluid Loss	Type Mud
Surface	17-1/2"	8.30	28	NC	FW Spud Mud
Intermediate	12-1/4"	10.00	30-32	NC	Brine Water
Intermediate 2	8-3/4"	8.00	30-31	NC	FW/Cut Brine
Production	6.125"	12.50	50-60	<10	OBM

**Matador Production Company
Charlie Sweeney Fed Com 203H
SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.
BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.
Eddy County, NM**

DRILL PLAN PAGE 4

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A 2-person mud-logging program will be used from 9700' 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 \approx 6700 psi. Expected bottom hole temperature is \approx 160° F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H₂S from the surface to the Bone Spring to meet the BLM's minimum requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since Matador has an H₂S safety package on all wells, attached is an "H₂S 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 \approx 3 months to drill and complete the well.



Matador Resources

Eddy County, NM (NAD27 NME)
Charlie Sweeney Federal 31-23S-28E
203H

OH

Plan: Preliminary Plan 1

Standard Planning Report

05 January, 2016





Phoenix Technology Services
Planning Report



Database: Compass 5000 GCR
Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Site: Charlie Sweeney Federal 31-23S-28E
Well: 203H
Wellbore: OH
Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	203H					
Well Position	+N/-S	0.00 usft	Northing:	456,416.00 usft	Latitude:	32° 15' 16.67812 N
	+E/-W	-30.00 usft	Easting:	564,395.00 usft	Longitude:	104° 7' 30.09522 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,108.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/20/2016	7.50	60.10	48,251

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	0.48

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	
1,266.79	4.00	153.35	1,266.57	-8.32	4.18	1.50	1.50	0.00	153.35	
3,236.48	4.00	153.35	3,231.46	-131.19	65.82	0.00	0.00	0.00	0.00	
3,503.27	0.00	0.00	3,498.03	-139.51	70.00	1.50	-1.50	0.00	180.00	
8,951.27	0.00	0.00	8,946.03	-139.51	70.00	0.00	0.00	0.00	0.00	
9,701.27	75.00	351.32	9,499.46	280.29	5.91	10.00	10.00	0.00	351.32	
9,951.27	90.00	351.32	9,532.00	524.62	-31.39	6.00	6.00	0.00	0.00	
10,256.75	90.00	0.48	9,532.00	829.00	-53.19	3.00	0.00	3.00	90.00	
14,299.90	90.00	0.48	9,532.00	4,872.00	-19.00	0.00	0.00	0.00	0.00	BHL Sweeney 203H



Phoenix Technology Services
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North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
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 1.50°/100'										
1,100.00	1.50	153.35	1,099.99	-1.17	0.59	-1.16	1.50	1.50	0.00	
1,200.00	3.00	153.35	1,199.91	-4.68	2.35	-4.66	1.50	1.50	0.00	
1,266.79	4.00	153.35	1,266.57	-8.32	4.18	-8.29	1.50	1.50	0.00	
Hold 4° Inc at 153.35° Azm										
1,300.00	4.00	153.35	1,299.70	-10.40	5.22	-10.35	0.00	0.00	0.00	
1,400.00	4.00	153.35	1,399.46	-16.63	8.35	-16.56	0.00	0.00	0.00	
1,500.00	4.00	153.35	1,499.21	-22.87	11.48	-22.77	0.00	0.00	0.00	
1,600.00	4.00	153.35	1,598.97	-29.11	14.61	-28.99	0.00	0.00	0.00	
1,700.00	4.00	153.35	1,698.73	-35.35	17.74	-35.20	0.00	0.00	0.00	
1,800.00	4.00	153.35	1,798.48	-41.58	20.86	-41.41	0.00	0.00	0.00	
1,900.00	4.00	153.35	1,898.24	-47.82	23.99	-47.62	0.00	0.00	0.00	
2,000.00	4.00	153.35	1,998.00	-54.06	27.12	-53.83	0.00	0.00	0.00	
2,100.00	4.00	153.35	2,097.75	-60.30	30.25	-60.04	0.00	0.00	0.00	
2,200.00	4.00	153.35	2,197.51	-66.53	33.38	-66.25	0.00	0.00	0.00	
2,300.00	4.00	153.35	2,297.26	-72.77	36.51	-72.46	0.00	0.00	0.00	
2,400.00	4.00	153.35	2,397.02	-79.01	39.64	-78.67	0.00	0.00	0.00	
2,500.00	4.00	153.35	2,496.78	-85.25	42.77	-84.89	0.00	0.00	0.00	
2,600.00	4.00	153.35	2,596.53	-91.48	45.90	-91.10	0.00	0.00	0.00	
9 5/8"										
2,700.00	4.00	153.35	2,696.29	-97.72	49.03	-97.31	0.00	0.00	0.00	
2,800.00	4.00	153.35	2,796.05	-103.96	52.16	-103.52	0.00	0.00	0.00	
2,900.00	4.00	153.35	2,895.80	-110.20	55.29	-109.73	0.00	0.00	0.00	
3,000.00	4.00	153.35	2,995.56	-116.43	58.42	-115.94	0.00	0.00	0.00	
3,100.00	4.00	153.35	3,095.31	-122.67	61.55	-122.15	0.00	0.00	0.00	
3,200.00	4.00	153.35	3,195.07	-128.91	64.68	-128.36	0.00	0.00	0.00	
3,236.48	4.00	153.35	3,231.46	-131.19	65.82	-130.63	0.00	0.00	0.00	
Start Drop 1.50°/100'										
3,300.00	3.05	153.35	3,294.86	-134.68	67.58	-134.11	1.50	-1.50	0.00	
3,400.00	1.55	153.35	3,394.78	-138.26	69.37	-137.68	1.50	-1.50	0.00	
3,503.27	0.00	0.00	3,498.03	-139.51	70.00	-138.92	1.50	-1.50	0.00	
Hold Vertical										
3,600.00	0.00	0.00	3,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
3,800.00	0.00	0.00	3,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
3,900.00	0.00	0.00	3,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
4,000.00	0.00	0.00	3,994.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
4,100.00	0.00	0.00	4,094.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
4,200.00	0.00	0.00	4,194.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,294.76	-139.51	70.00	-138.92	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,394.76	-139.51	70.00	-138.92	0.00	0.00	0.00	



Phoenix Technology Services

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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)
4,500.00	0.00	0.00	4,494.76	-139.51	70.00	-138.92	0.00	0.00	0.00
4,600.00	0.00	0.00	4,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00
4,700.00	0.00	0.00	4,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00
4,800.00	0.00	0.00	4,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00
4,900.00	0.00	0.00	4,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,000.00	0.00	0.00	4,994.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,100.00	0.00	0.00	5,094.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,200.00	0.00	0.00	5,194.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,300.00	0.00	0.00	5,294.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,400.00	0.00	0.00	5,394.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,500.00	0.00	0.00	5,494.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,600.00	0.00	0.00	5,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,700.00	0.00	0.00	5,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,800.00	0.00	0.00	5,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00
5,900.00	0.00	0.00	5,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,000.00	0.00	0.00	5,994.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,100.00	0.00	0.00	6,094.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,200.00	0.00	0.00	6,194.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,300.00	0.00	0.00	6,294.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,400.00	0.00	0.00	6,394.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,500.00	0.00	0.00	6,494.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,600.00	0.00	0.00	6,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,700.00	0.00	0.00	6,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,800.00	0.00	0.00	6,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00
6,900.00	0.00	0.00	6,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,000.00	0.00	0.00	6,994.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,100.00	0.00	0.00	7,094.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,200.00	0.00	0.00	7,194.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,300.00	0.00	0.00	7,294.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,400.00	0.00	0.00	7,394.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,500.00	0.00	0.00	7,494.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,600.00	0.00	0.00	7,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,700.00	0.00	0.00	7,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,800.00	0.00	0.00	7,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00
7,900.00	0.00	0.00	7,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,000.00	0.00	0.00	7,994.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,100.00	0.00	0.00	8,094.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,200.00	0.00	0.00	8,194.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,300.00	0.00	0.00	8,294.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,400.00	0.00	0.00	8,394.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,500.00	0.00	0.00	8,494.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,600.00	0.00	0.00	8,594.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,700.00	0.00	0.00	8,694.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,800.00	0.00	0.00	8,794.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,900.00	0.00	0.00	8,894.76	-139.51	70.00	-138.92	0.00	0.00	0.00
8,951.27	0.00	0.00	8,946.03	-139.51	70.00	-138.92	0.00	0.00	0.00
KOP: Start Build 10°/100' to 75° Inc									
9,000.00	4.87	351.32	8,994.71	-137.46	69.69	-136.87	10.00	10.00	0.00
9,050.00	9.87	351.32	9,044.28	-131.12	68.72	-130.54	10.00	10.00	0.00
9,100.00	14.87	351.32	9,093.10	-120.53	67.10	-119.97	10.00	10.00	0.00
9,150.00	19.87	351.32	9,140.80	-105.78	64.85	-105.23	10.00	10.00	0.00
9,200.00	24.87	351.32	9,187.02	-86.97	61.98	-86.45	10.00	10.00	0.00
9,250.00	29.87	351.32	9,231.41	-64.25	58.51	-63.76	10.00	10.00	0.00
9,300.00	34.87	351.32	9,273.63	-37.79	54.47	-37.34	10.00	10.00	0.00



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MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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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)
9,350.00	39.87	351.32	9,313.35	-7.80	49.89	-7.38	10.00	10.00	0.00
9,400.00	44.87	351.32	9,350.28	25.50	44.81	25.87	10.00	10.00	0.00
9,450.00	49.87	351.32	9,384.13	61.86	39.26	62.18	10.00	10.00	0.00
9,500.00	54.87	351.32	9,414.64	100.99	33.28	101.27	10.00	10.00	0.00
9,550.00	59.87	351.32	9,441.59	142.61	26.93	142.83	10.00	10.00	0.00
9,600.00	64.87	351.32	9,464.77	186.38	20.25	186.55	10.00	10.00	0.00
9,650.00	69.87	351.32	9,484.00	231.99	13.29	232.10	10.00	10.00	0.00
9,701.27	75.00	351.32	9,499.47	280.30	5.91	280.34	10.00	10.00	0.00
Start Build 6°/100' - 7"									
9,750.00	77.92	351.32	9,510.87	327.12	-1.24	327.10	6.00	6.00	0.00
9,800.00	80.92	351.32	9,520.05	375.71	-8.66	375.62	6.00	6.00	0.00
9,850.00	83.92	351.32	9,526.64	424.70	-16.13	424.55	6.00	6.00	0.00
9,900.00	86.92	351.32	9,530.63	473.96	-23.65	473.75	6.00	6.00	0.00
9,951.27	90.00	351.32	9,532.00	524.62	-31.39	524.33	6.00	6.00	0.00
LP: 90° Inc, Start Turn 3°/100'									
10,000.00	90.00	352.78	9,532.00	572.88	-38.13	572.54	3.00	0.00	3.00
10,100.00	90.00	355.78	9,532.00	672.37	-48.09	671.94	3.00	0.00	3.00
10,200.00	90.00	358.78	9,532.00	772.25	-52.83	771.78	3.00	0.00	3.00
10,256.75	90.00	0.48	9,532.00	829.00	-53.19	828.52	3.00	0.00	3.00
Hold 0.48° Azm									
10,300.00	90.00	0.48	9,532.00	872.24	-52.83	871.77	0.00	0.00	0.00
10,400.00	90.00	0.48	9,532.00	972.24	-51.98	971.77	0.00	0.00	0.00
10,500.00	90.00	0.48	9,532.00	1,072.24	-51.14	1,071.77	0.00	0.00	0.00
10,600.00	90.00	0.48	9,532.00	1,172.23	-50.29	1,171.77	0.00	0.00	0.00
10,700.00	90.00	0.48	9,532.00	1,272.23	-49.45	1,271.77	0.00	0.00	0.00
10,800.00	90.00	0.48	9,532.00	1,372.22	-48.60	1,371.77	0.00	0.00	0.00
10,900.00	90.00	0.48	9,532.00	1,472.22	-47.75	1,471.77	0.00	0.00	0.00
11,000.00	90.00	0.48	9,532.00	1,572.22	-46.91	1,571.77	0.00	0.00	0.00
11,100.00	90.00	0.48	9,532.00	1,672.21	-46.06	1,671.77	0.00	0.00	0.00
11,200.00	90.00	0.48	9,532.00	1,772.21	-45.22	1,771.77	0.00	0.00	0.00
11,300.00	90.00	0.48	9,532.00	1,872.21	-44.37	1,871.77	0.00	0.00	0.00
11,400.00	90.00	0.48	9,532.00	1,972.20	-43.53	1,971.77	0.00	0.00	0.00
11,500.00	90.00	0.48	9,532.00	2,072.20	-42.68	2,071.77	0.00	0.00	0.00
11,600.00	90.00	0.48	9,532.00	2,172.20	-41.83	2,171.77	0.00	0.00	0.00
11,700.00	90.00	0.48	9,532.00	2,272.19	-40.99	2,271.77	0.00	0.00	0.00
11,800.00	90.00	0.48	9,532.00	2,372.19	-40.14	2,371.77	0.00	0.00	0.00
11,900.00	90.00	0.48	9,532.00	2,472.19	-39.30	2,471.77	0.00	0.00	0.00
12,000.00	90.00	0.48	9,532.00	2,572.18	-38.45	2,571.77	0.00	0.00	0.00
12,100.00	90.00	0.48	9,532.00	2,672.18	-37.61	2,671.77	0.00	0.00	0.00
12,200.00	90.00	0.48	9,532.00	2,772.17	-36.76	2,771.77	0.00	0.00	0.00
12,300.00	90.00	0.48	9,532.00	2,872.17	-35.91	2,871.77	0.00	0.00	0.00
12,400.00	90.00	0.48	9,532.00	2,972.17	-35.07	2,971.77	0.00	0.00	0.00
12,500.00	90.00	0.48	9,532.00	3,072.16	-34.22	3,071.77	0.00	0.00	0.00
12,600.00	90.00	0.48	9,532.00	3,172.16	-33.38	3,171.77	0.00	0.00	0.00
12,700.00	90.00	0.48	9,532.00	3,272.16	-32.53	3,271.77	0.00	0.00	0.00
12,800.00	90.00	0.48	9,532.00	3,372.15	-31.69	3,371.77	0.00	0.00	0.00
12,900.00	90.00	0.48	9,532.00	3,472.15	-30.84	3,471.77	0.00	0.00	0.00
13,000.00	90.00	0.48	9,532.00	3,572.15	-29.99	3,571.77	0.00	0.00	0.00
13,100.00	90.00	0.48	9,532.00	3,672.14	-29.15	3,671.77	0.00	0.00	0.00
13,200.00	90.00	0.48	9,532.00	3,772.14	-28.30	3,771.77	0.00	0.00	0.00
13,300.00	90.00	0.48	9,532.00	3,872.14	-27.46	3,871.77	0.00	0.00	0.00
13,400.00	90.00	0.48	9,532.00	3,972.13	-26.61	3,971.77	0.00	0.00	0.00
13,500.00	90.00	0.48	9,532.00	4,072.13	-25.77	4,071.77	0.00	0.00	0.00



Phoenix Technology Services
Planning Report



Database: Compass 5000 GCR
Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Site: Charlie Sweeney Federal 31-23S-28E
Well: 203H
Wellbore: OH
Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,600.00	90.00	0.48	9,532.00	4,172.12	-24.92	4,171.77	0.00	0.00	0.00
13,700.00	90.00	0.48	9,532.00	4,272.12	-24.07	4,271.77	0.00	0.00	0.00
13,800.00	90.00	0.48	9,532.00	4,372.12	-23.23	4,371.77	0.00	0.00	0.00
13,900.00	90.00	0.48	9,532.00	4,472.11	-22.38	4,471.77	0.00	0.00	0.00
14,000.00	90.00	0.48	9,532.00	4,572.11	-21.54	4,571.77	0.00	0.00	0.00
14,100.00	90.00	0.48	9,532.00	4,672.11	-20.69	4,671.77	0.00	0.00	0.00
14,200.00	90.00	0.48	9,532.00	4,772.10	-19.84	4,771.77	0.00	0.00	0.00
14,299.90	90.00	0.48	9,532.00	4,872.00	-19.00	4,871.67	0.00	0.00	0.00
TD at 14299.90									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LPP Sweeney 203H - hit/miss target - Shape - Point	0.00	0.00	9,532.00	4,782.00	-19.00	461,198.00	564,376.00	32° 16' 4.00239 N	104° 7' 30.20842 W
- plan misses target center by 9.93usft at 14200.00usft MD (9532.00 TVD, 4772.10 N, -19.84 E)									
FPP Sweeney 203H - Point	0.00	0.00	9,532.00	140.00	-59.00	456,556.00	564,336.00	32° 15' 18.06473 N	104° 7' 30.77913 W
- plan misses target center by 113.80usft at 9600.00usft MD (9464.77 TVD, 186.38 N, 20.25 E)									
BHL Sweeney 203H - Point	0.00	0.00	9,532.00	4,872.00	-19.00	461,288.00	564,376.00	32° 16' 4.89305 N	104° 7' 30.20639 W
- plan hits target center									

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	2,596.53	9 5/8"	9-5/8	12-1/4
9,701.27	9,499.47	7"	7	7-1/2

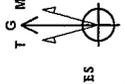
Plan Annotations

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 1.50°/100'
1,266.79	1,266.57	-8.32	4.18	Hold 4° Inc at 153.35° Azm
3,236.48	3,231.46	-131.19	65.82	Start Drop 1.50°/100'
3,503.27	3,498.03	-139.51	70.00	Hold Vertical
8,951.27	8,946.03	-139.51	70.00	KOP: Start Build 10°/100' to 75° Inc
9,701.27	9,499.46	280.29	5.91	Start Build 6°/100'
9,951.27	9,532.00	524.62	-31.39	LP: 90° Inc, Start Turn 3°/100'
10,256.75	9,532.00	829.00	-53.19	Hold 0.48° Azm
14,299.90	9,532.00	4,872.00	-19.00	TD at 14299.90



Project: Eddy County, NM (NAD27 NME)
 Site: Charlie Sweeney Federal 31-23S-28E
 Well: 203H
 Wellbore: OH
 Design: Preliminary Plan 1
 Rig: Patterson 297

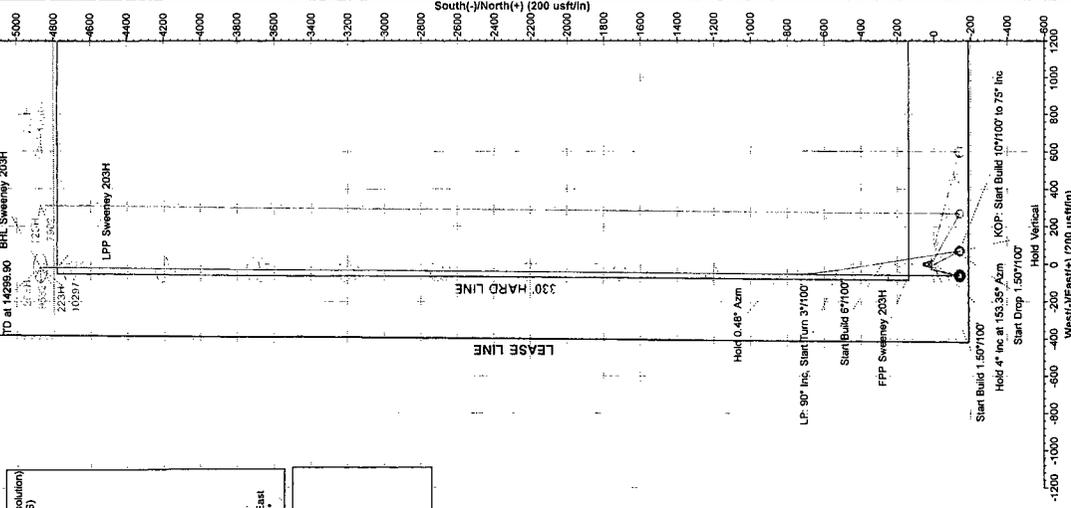
Alignments to Grid North
 True North: 7.35°
 Magnetic North: 7.25°
 Magnetic Field
 Strength: 48.10
 Dip Angle: 60.10°
 Date: 1/20/2016
 Model: HDGM



PHOENIX
 TECHNOLOGY SERVICES

West(-)/East(+) (200 usft/in)

South(-)/North(+) (200 usft/in)



Map System: US State Plane 1927 (Exact solution)
 Zone Name: New Mexico East 3001
 Local Origin: Well 203H, Grid North
 Latitude: 32° 15' 16.67611 N
 Longitude: 104° 7' 30.05522 W
 Grid East: 564395.00
 Grid North: 456416.00
 Scale Factor: 1.000

Geomagnetic Model: HDGM
 Sample Date: 2/10/16
 Magnetic Declination: 15.10°
 Dip Angle from Horizontal: 60.10°
 KOP Start Build: 107100' to 75' Inc
 LP: 90° Inc, Start Turn 37100'
 FPP Sweeney 203H
 TO at 14299.90

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

LEGEND

- 223H, OH, Preliminary Plan 1 V0
- 227H, OH, Preliminary Plan 1 V0
- 207H, OH, Preliminary Plan 1 V0
- 123H, OH, Preliminary Plan 1 V0
- Preliminary Plan 1

WELL DETAILS

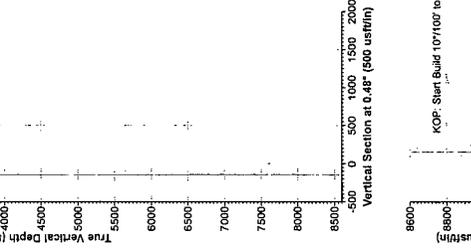
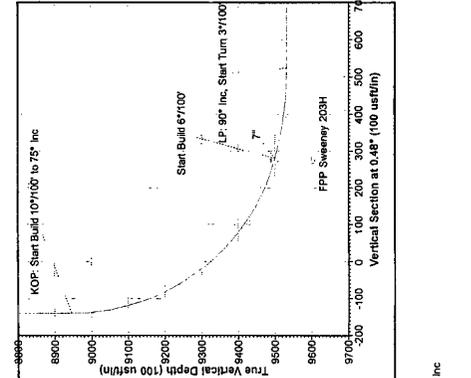
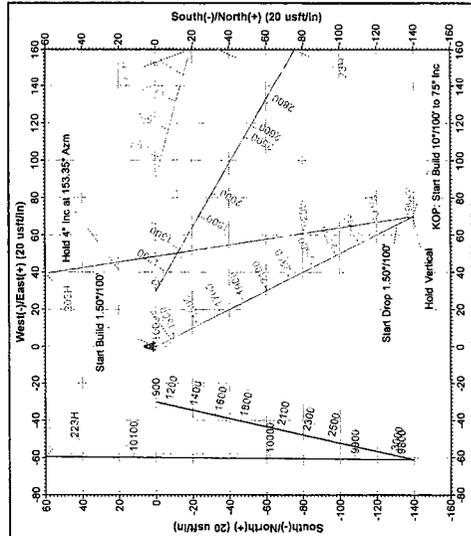
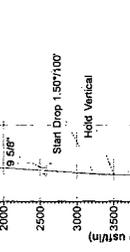
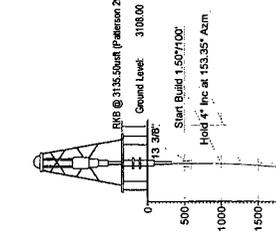
Well Name	Charlie Sweeney Federal 31-23S-28E
Well ID	203H
Wellbore	OH
Design	Preliminary Plan 1
Rig	Patterson 297
Ground Level	3108.00
Latitude	32° 15' 16.67611 N
Longitude	104° 7' 30.05522 W

SECTION DETAILS

Sec	MO	Inc	Abi	-N/S	-E/W	TVD	W	NS	EW	Depth	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1056.79	4.00	153.35	1266.57	-8.32	4.16	1.50	153.35	-8.29	1060.79	0.00
3	3236.48	4.00	153.35	3231.46	-131.19	65.92	0.00	0.00	-130.83	1064.79	0.00
4	4861.27	0.00	0.00	4861.27	0.00	70.00	0.00	0.00	-138.82	1071.00	0.00
5	8951.27	0.00	0.00	8951.27	0.00	135.51	70.00	0.00	-138.82	1071.00	0.00
6	9761.27	75.00	351.32	9469.46	286.29	5.91	10.00	351.32	286.33	1071.00	0.00
7	9951.27	80.00	351.32	9521.00	524.62	-31.39	6.00	0.00	524.33	1071.00	0.00
8	9951.27	80.00	351.32	9521.00	524.62	-31.39	6.00	0.00	524.33	1071.00	0.00
9	14299.90	80.00	0.48	8533.00	4822.00	-19.20	0.00	0.00	4871.67	84.00	0.00

DESIGN TARGET DETAILS

Name	TVD	-N/S	-E/W	Northing	Easting	Latitude	Longitude
BHL Sweeney 203H	9532.00	4872.00	-19.00	46788.00	564376.00	32° 16' 4.6935 N	104° 7' 30.2039 W
LPP Sweeney 203H	9533.00	4882.00	-19.00	46788.00	564376.00	32° 16' 4.6935 N	104° 7' 30.2039 W
FPP Sweeney 203H	9533.00	4882.00	-19.00	46788.00	564376.00	32° 16' 4.6935 N	104° 7' 30.2039 W



West(-)/East(+) (200 usft/in)

South(-)/North(+) (200 usft/in)

True Vertical Depth (100 usft/in)

TO at 14299.90

TO at 14299.90

Vertical Section at 0.48° (100 usft/in)

Created By: Justin Amos Date: 1/22, January 05 2016



Matador Resources

**Eddy County, NM (NAD27 NME)
Charlie Sweeney Federal 31-23S-28E
203H**

**OH
Preliminary Plan 1**

Anticollision Report

05 January, 2016





Phoenix Technology Services
Anticollision Report



Company: Matador Resources
 Project: Eddy County, NM (NAD27 NME)
 Reference Site: Charlie Sweeney Federal 31-23S-28E
 Site Error: 0.00 usft
 Reference Well: 203H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
 TVD Reference: RKB @ 3135.50usft (Patterson 297)
 MD Reference: RKB @ 3135.50usft (Patterson 297)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: Compass 5000 GCR
 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	14,299.90	Preliminary Plan 1 (OH)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Charlie Sweeney Federal 31-23S-28E						
123H - OH - Preliminary Plan 1	1,000.00	1,000.00	30.00	23.29	4.469	CC
123H - OH - Preliminary Plan 1	1,100.00	1,099.32	30.54	23.14	4.129	ES
123H - OH - Preliminary Plan 1	7,500.00	7,503.73	200.26	147.95	3.828	SF
207H - OH - Preliminary Plan 1	1,000.00	1,000.00	60.00	53.29	8.939	CC
207H - OH - Preliminary Plan 1	1,100.00	1,098.53	60.64	53.24	8.199	ES
207H - OH - Preliminary Plan 1	14,300.90	14,316.22	659.99	503.20	4.209	SF
223H - OH - Preliminary Plan 1	965.64	968.64	30.00	23.52	4.632	CC
223H - OH - Preliminary Plan 1	1,000.00	1,002.99	30.00	23.28	4.463	ES
223H - OH - Preliminary Plan 1	9,100.34	9,101.22	129.57	66.00	2.038	SF
227H - OH - Preliminary Plan 1	1,000.00	999.00	90.00	83.29	13.415	CC
227H - OH - Preliminary Plan 1	1,100.00	1,096.79	90.63	83.24	12.264	ES
227H - OH - Preliminary Plan 1	9,100.00	9,129.35	532.18	468.51	8.358	SF

Offset Design Charlie Sweeney Federal 31-23S-28E - 123H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+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	1,099.32	1,099.31	3.70	3.70	-64.31	-0.65	31.12	30.54	23.14	7.40	4.129	ES	
1,200.00	1,199.91	1,198.61	1,198.52	4.03	4.03	-66.97	-2.60	34.46	32.21	24.15	8.06	3.997		
1,266.79	1,266.57	1,264.88	1,264.67	4.25	4.26	-69.45	-4.62	37.93	34.01	25.51	8.51	3.999		
1,300.00	1,299.70	1,298.06	1,297.77	4.36	4.37	-70.75	-5.79	39.93	35.07	26.34	8.73	4.017		
1,400.00	1,399.46	1,397.44	1,397.44	4.70	4.72	-74.23	-9.29	45.96	38.37	28.96	9.42	4.076		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 123H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: O-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
							+N-S (usft)	+E-W (usft)						
1,500.00	1,499.21	1,497.90	1,497.12	5.05	5.07	-77.15	-12.80	51.98	41.79	31.68	10.11	4.134		
1,600.00	1,598.97	1,597.82	1,596.80	5.40	5.42	-79.82	-16.31	58.00	45.30	34.49	10.81	4.191		
1,700.00	1,698.73	1,697.74	1,696.48	5.75	5.78	-81.74	-19.82	64.02	48.88	37.36	11.51	4.245		
1,800.00	1,798.48	1,797.66	1,796.15	6.10	6.13	-83.56	-23.33	70.05	52.51	40.29	12.22	4.297		
1,900.00	1,898.24	1,897.58	1,895.83	6.46	6.49	-85.14	-26.83	76.07	56.20	43.26	12.94	4.344		
2,000.00	1,998.00	1,997.51	1,995.51	6.82	6.85	-86.53	-30.34	82.09	59.92	46.27	13.65	4.389		
2,100.00	2,097.75	2,097.43	2,095.19	7.18	7.21	-87.76	-33.85	88.12	63.67	49.30	14.37	4.430		
2,200.00	2,197.51	2,197.35	2,194.86	7.54	7.57	-88.85	-37.36	94.14	67.45	52.35	15.09	4.469		
2,300.00	2,297.26	2,297.27	2,294.54	7.90	7.94	-89.82	-40.87	100.16	71.25	55.43	15.82	4.504		
2,400.00	2,397.02	2,397.19	2,394.22	8.26	8.30	-90.70	-44.38	106.18	75.07	58.52	16.54	4.538		
2,500.00	2,496.78	2,497.11	2,493.90	8.63	8.67	-91.49	-47.88	112.21	78.90	61.63	17.27	4.569		
2,600.00	2,596.53	2,597.03	2,593.57	8.99	9.03	-92.21	-51.39	118.23	82.75	64.75	18.00	4.598		
2,700.00	2,696.29	2,696.95	2,693.25	9.36	9.40	-92.86	-54.90	124.25	86.61	67.88	18.73	4.625		
2,800.00	2,796.05	2,796.33	2,792.36	9.72	9.76	-93.30	-58.53	130.48	90.62	71.16	19.46	4.658		
2,900.00	2,895.80	2,894.98	2,890.57	10.09	10.13	-92.55	-63.23	138.56	95.74	75.55	20.19	4.743		
3,000.00	2,995.56	2,993.39	2,988.26	10.46	10.50	-90.66	-69.19	148.79	102.23	81.32	20.92	4.887		
3,100.00	3,095.31	3,092.66	3,086.58	10.82	10.88	-88.20	-76.11	160.67	109.85	88.20	21.66	5.073		
3,200.00	3,195.07	3,192.26	3,185.21	11.19	11.27	-86.03	-83.08	172.64	117.69	95.30	22.39	5.256		
3,236.48	3,231.46	3,228.59	3,221.19	11.32	11.41	-85.31	-85.62	177.00	120.59	97.93	22.66	5.321		
3,300.00	3,294.86	3,291.83	3,283.81	11.56	11.66	-83.97	-90.05	184.60	125.74	102.61	23.13	5.436		
3,400.00	3,394.78	3,391.24	3,382.26	11.92	12.04	-81.18	-97.01	196.55	134.29	110.43	23.85	5.630		
3,500.00	3,494.76	3,490.42	3,480.47	12.26	12.43	-77.75	-103.95	208.47	143.68	119.13	24.55	5.852		
3,503.27	3,498.03	3,493.65	3,483.67	12.27	12.45	75.73	-104.18	208.86	144.00	119.49	24.52	5.874		
3,600.00	3,594.76	3,589.45	3,578.54	12.60	12.82	79.22	-110.89	220.38	153.93	128.76	25.17	6.116		
3,700.00	3,694.76	3,688.48	3,676.60	12.93	13.21	82.39	-117.82	232.28	164.73	138.88	25.85	6.372		
3,800.00	3,794.76	3,790.00	3,777.21	13.27	13.61	85.12	-124.64	243.99	175.51	148.97	26.54	6.613		
3,900.00	3,894.76	3,893.45	3,880.05	13.61	14.01	87.13	-130.29	253.69	184.51	157.27	27.24	6.773		
4,000.00	3,994.76	3,997.45	3,983.70	13.95	14.40	88.51	-134.55	261.01	191.40	163.45	27.95	6.849		
4,100.00	4,094.76	4,101.83	4,087.93	14.29	14.78	89.38	-137.40	265.91	196.04	167.38	28.66	6.841		
4,200.00	4,194.76	4,206.45	4,192.50	14.63	15.15	89.80	-138.82	268.34	198.36	168.99	29.37	6.755		
4,300.00	4,294.76	4,308.71	4,294.76	14.97	15.49	89.85	-138.99	268.63	198.63	168.57	30.06	6.609		
4,400.00	4,394.76	4,408.71	4,394.76	15.31	15.82	89.85	-138.99	268.63	198.63	167.89	30.74	6.462		
4,500.00	4,494.76	4,508.71	4,494.76	15.66	16.16	89.85	-138.99	268.63	198.63	167.21	31.42	6.322		
4,600.00	4,594.76	4,608.71	4,594.76	16.00	16.49	89.85	-138.99	268.63	198.63	166.53	32.10	6.187		
4,700.00	4,694.76	4,708.71	4,694.76	16.35	16.83	89.85	-138.99	268.63	198.63	165.84	32.79	6.058		
4,800.00	4,794.76	4,808.71	4,794.76	16.69	17.16	89.85	-138.99	268.63	198.63	165.16	33.48	5.934		
4,900.00	4,894.76	4,908.71	4,894.76	17.04	17.50	89.85	-138.99	268.63	198.63	164.47	34.16	5.814		
5,000.00	4,994.76	5,008.71	4,994.76	17.38	17.84	89.85	-138.99	268.63	198.63	163.78	34.85	5.699		
5,100.00	5,094.76	5,108.71	5,094.76	17.73	18.18	89.85	-138.99	268.63	198.63	163.09	35.54	5.588		
5,200.00	5,194.76	5,208.71	5,194.76	18.08	18.52	89.85	-138.99	268.63	198.63	162.40	36.23	5.482		
5,300.00	5,294.76	5,308.71	5,294.76	18.43	18.86	89.85	-138.99	268.63	198.63	161.70	36.93	5.379		
5,400.00	5,394.76	5,408.71	5,394.76	18.77	19.20	89.85	-138.99	268.63	198.63	161.01	37.62	5.280		
5,500.00	5,494.76	5,508.71	5,494.76	19.12	19.54	89.85	-138.99	268.63	198.63	160.32	38.31	5.184		
5,600.00	5,594.76	5,608.71	5,594.76	19.47	19.88	89.85	-138.99	268.63	198.63	159.62	39.01	5.092		
5,700.00	5,694.76	5,708.71	5,694.76	19.82	20.22	89.85	-138.99	268.63	198.63	158.93	39.70	5.003		
5,800.00	5,794.76	5,808.71	5,794.76	20.17	20.57	89.85	-138.99	268.63	198.63	158.23	40.40	4.917		
5,900.00	5,894.76	5,908.71	5,894.76	20.52	20.91	89.85	-138.99	268.63	198.63	157.53	41.10	4.833		
6,000.00	5,994.76	6,008.71	5,994.76	20.87	21.26	89.85	-138.99	268.63	198.63	156.84	41.80	4.752		
6,100.00	6,094.76	6,108.71	6,094.76	21.22	21.60	89.85	-138.99	268.63	198.63	156.14	42.49	4.674		
6,200.00	6,194.76	6,208.71	6,194.76	21.57	21.95	89.85	-138.99	268.63	198.63	155.44	43.19	4.599		
6,300.00	6,294.76	6,308.71	6,294.76	21.92	22.29	89.85	-138.99	268.63	198.63	154.74	43.89	4.525		
6,400.00	6,394.76	6,408.71	6,394.76	22.27	22.64	89.85	-138.99	268.63	198.63	154.04	44.59	4.454		

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



Phoenix Technology Services
Anticollision Report



Company: Matador Resources
 Project: Eddy County, NM (NAD27 NME)
 Reference Site: Charlie Sweeney Federal 31-23S-28E
 Site Error: 0.00 usft
 Reference Well: 203H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
 TVD Reference: RKB @ 3135.50usft (Patterson 297)
 MD Reference: RKB @ 3135.50usft (Patterson 297)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: Compass 5000 GCR
 Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 123H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: O-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference				Offset		Semi Major Axis			Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
6,500.00	6,494.76	6,508.71	6,494.76	22.63	22.98	89.85	-138.99	268.63	198.63	153.34	45.29	4.385		
6,600.00	6,594.76	6,608.71	6,594.76	22.98	23.33	89.85	-138.99	268.63	198.63	152.64	45.99	4.319		
6,700.00	6,694.76	6,708.71	6,694.76	23.33	23.68	89.85	-138.99	268.63	198.63	151.93	46.70	4.254		
6,800.00	6,794.76	6,808.71	6,794.76	23.68	24.02	89.85	-138.99	268.63	198.63	151.23	47.40	4.191		
6,900.00	6,894.76	6,908.71	6,894.76	24.03	24.37	89.85	-138.99	268.63	198.63	150.53	48.10	4.129		
7,000.00	6,994.76	7,008.71	6,994.76	24.39	24.72	89.85	-138.99	268.63	198.63	149.83	48.80	4.070		
7,100.00	7,094.76	7,108.71	7,094.76	24.74	25.07	89.85	-138.99	268.63	198.63	149.12	49.51	4.012		
7,200.00	7,194.76	7,208.71	7,194.76	25.09	25.42	89.85	-138.99	268.63	198.63	148.42	50.21	3.956		
7,300.00	7,294.76	7,308.71	7,294.76	25.44	25.77	89.85	-138.99	268.63	198.63	147.72	50.91	3.901		
7,334.20	7,328.96	7,342.91	7,328.96	25.57	25.89	89.85	-138.99	268.63	198.63	147.48	51.16	3.883		
7,400.00	7,394.76	7,408.18	7,394.09	25.80	26.11	88.78	-135.29	268.66	198.71	147.09	51.62	3.850		
7,500.00	7,494.76	7,503.73	7,487.68	26.15	26.43	83.42	-116.59	268.82	200.26	147.95	52.32	3.828 SF		
7,600.00	7,594.76	7,590.96	7,569.34	26.50	26.69	75.00	-86.16	269.08	207.66	154.68	52.98	3.919		
7,700.00	7,694.76	7,687.50	7,636.48	26.86	26.89	65.71	-49.53	269.39	226.38	172.77	53.61	4.223		
7,800.00	7,794.76	7,732.97	7,689.60	27.21	27.05	57.30	-11.32	269.71	259.57	205.39	54.18	4.791		
7,900.00	7,894.76	7,788.25	7,730.82	27.57	27.16	50.48	25.48	270.02	306.77	252.08	54.69	5.609		
8,000.00	7,994.76	7,834.73	7,762.60	27.92	27.25	45.20	59.38	270.31	365.49	310.33	55.16	6.626		
8,100.00	8,094.76	7,873.88	7,787.16	28.27	27.32	41.17	89.85	270.57	432.96	377.37	55.59	7.788		
8,200.00	8,194.76	7,900.00	7,802.37	28.63	27.37	38.70	111.09	270.74	507.03	451.03	56.00	9.054		
8,300.00	8,294.76	7,935.22	7,821.31	28.98	27.46	35.64	140.78	271.00	585.77	529.36	56.41	10.384		
8,400.00	8,394.76	7,950.00	7,828.70	29.34	27.49	34.46	153.57	271.10	668.40	611.62	56.78	11.771		
8,500.00	8,494.76	7,980.38	7,842.86	29.69	27.58	32.18	180.44	271.33	753.58	696.40	57.17	13.180		
8,600.00	8,594.76	8,000.00	7,851.24	30.05	27.63	30.82	198.19	271.48	841.11	783.55	57.55	14.614		
8,700.00	8,694.76	8,000.00	7,851.24	30.40	27.63	30.82	198.19	271.48	930.68	872.77	57.91	16.072		
8,800.00	8,794.76	8,028.74	7,862.40	30.75	27.72	28.98	224.66	271.71	1,021.08	962.78	58.29	17.516		
8,900.00	8,894.76	8,050.00	7,869.80	31.11	27.78	27.73	244.59	271.87	1,113.03	1,054.37	58.66	18.974		
8,951.27	8,946.03	8,050.00	7,869.80	31.29	27.78	27.73	244.59	271.87	1,160.41	1,101.57	58.84	19.720		
9,000.00	8,994.71	8,050.00	7,869.80	31.46	27.78	30.26	244.59	271.87	1,205.09	1,146.28	58.82	20.489		
9,050.00	9,044.28	8,050.00	7,869.80	31.63	27.78	25.62	244.59	271.87	1,249.73	1,191.24	58.49	21.367		
9,100.00	9,093.10	8,067.99	7,875.48	31.80	27.84	21.89	261.66	272.02	1,292.54	1,234.76	57.78	22.371		
9,150.00	9,140.80	8,076.59	7,878.01	31.96	27.87	19.25	269.89	272.09	1,333.69	1,277.02	56.67	23.535		
9,200.00	9,187.02	8,100.00	7,884.25	32.12	27.94	17.15	292.44	272.28	1,373.10	1,317.91	55.19	24.880		
9,250.00	9,231.41	8,100.00	7,884.25	32.27	27.94	15.61	292.44	272.28	1,409.89	1,356.55	53.33	26.436		
9,300.00	9,273.63	8,100.00	7,884.25	32.41	27.94	14.37	292.44	272.28	1,444.60	1,393.46	51.14	28.248		
9,350.00	9,313.35	8,100.00	7,884.25	32.55	27.94	13.34	292.44	272.28	1,477.14	1,428.50	48.64	30.369		
9,400.00	9,350.28	8,128.22	7,890.54	32.69	28.03	12.54	319.95	272.51	1,506.44	1,460.53	45.92	32.807		
9,450.00	9,384.13	8,150.00	7,894.47	32.82	28.10	11.91	341.37	272.69	1,533.53	1,490.54	42.98	35.676		
9,500.00	9,414.64	8,150.00	7,894.47	32.96	28.10	11.35	341.37	272.69	1,557.57	1,517.71	39.86	39.077		
9,550.00	9,441.59	8,150.00	7,894.47	33.10	28.10	10.89	341.37	272.69	1,579.08	1,542.43	36.65	43.084		
9,600.00	9,464.77	8,176.30	7,898.12	33.24	28.19	10.62	367.42	272.91	1,597.18	1,563.65	33.54	47.622		
9,650.00	9,484.00	8,200.00	7,900.39	33.39	28.27	10.42	391.00	273.11	1,612.65	1,582.06	30.59	52.723		
9,700.00	9,499.14	8,200.00	7,900.39	33.54	28.27	10.19	391.00	273.11	1,624.75	1,596.88	27.87	58.296		
9,701.27	9,499.46	8,200.00	7,900.39	33.55	28.27	10.19	391.00	273.11	1,625.02	1,597.22	27.81	58.438		
9,750.00	9,510.87	8,200.00	7,900.39	33.70	28.27	10.08	391.00	273.11	1,634.94	1,608.44	26.49	61.719		
9,800.00	9,520.05	8,242.99	7,902.00	33.87	28.41	10.19	433.95	273.48	1,643.49	1,617.91	25.59	64.231		
9,850.00	9,526.64	8,242.99	7,902.00	34.04	28.41	10.12	433.95	273.48	1,650.28	1,625.51	24.77	66.617		
9,900.00	9,530.63	8,280.49	7,902.00	34.23	28.55	10.25	471.45	273.79	1,655.57	1,631.07	24.50	67.574		
9,951.27	9,532.00	8,331.08	7,902.00	34.43	28.75	10.49	522.03	274.22	1,658.41	1,633.71	24.70	67.146		
10,000.00	9,532.00	8,379.28	7,902.00	34.63	28.94	10.77	570.24	274.63	1,659.74	1,634.58	25.16	65.977		
10,100.00	9,532.00	8,478.69	7,902.00	35.07	29.41	11.19	669.64	275.47	1,661.81	1,635.72	26.09	63.695		
10,200.00	9,532.00	8,578.52	7,902.00	35.56	29.93	11.41	769.46	276.31	1,662.91	1,635.91	27.00	61.590		
10,256.75	9,532.00	8,635.26	7,902.00	35.85	30.26	11.44	826.21	276.79	1,663.07	1,635.57	27.50	60.474		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 123H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	9,532.00	8,678.51	7,902.00	36.07	30.52	11.44	869.45	277.16	1,663.07	1,635.19	27.89	59.633		
10,400.00	9,532.00	8,778.51	7,902.00	36.64	31.16	11.44	969.45	278.00	1,663.07	1,634.24	28.83	57.678		
10,500.00	9,532.00	8,878.51	7,902.00	37.25	31.86	11.44	1,069.45	278.85	1,663.07	1,633.23	29.84	55.734		
10,600.00	9,532.00	8,978.51	7,902.00	37.91	32.60	11.44	1,169.44	279.70	1,663.07	1,632.17	30.90	53.822		
10,700.00	9,532.00	9,078.51	7,902.00	38.61	33.39	11.44	1,269.44	280.54	1,663.07	1,631.07	32.01	51.958		
10,800.00	9,532.00	9,178.51	7,902.00	39.35	34.23	11.44	1,369.43	281.39	1,663.07	1,629.91	33.16	50.152		
10,900.00	9,532.00	9,278.51	7,902.00	40.13	35.10	11.44	1,469.43	282.23	1,663.07	1,628.72	34.35	48.412		
11,000.00	9,532.00	9,378.51	7,902.00	40.95	36.02	11.44	1,569.43	283.08	1,663.07	1,627.49	35.58	46.741		
11,100.00	9,532.00	9,478.51	7,902.00	41.81	36.96	11.44	1,669.42	283.92	1,663.07	1,626.23	36.84	45.143		
11,200.00	9,532.00	9,578.51	7,902.00	42.69	37.94	11.44	1,769.42	284.77	1,663.07	1,624.94	38.13	43.618		
11,300.00	9,532.00	9,678.51	7,902.00	43.61	38.95	11.44	1,869.42	285.62	1,663.07	1,623.63	39.44	42.164		
11,400.00	9,532.00	9,778.51	7,902.00	44.55	39.98	11.44	1,969.41	286.46	1,663.07	1,622.29	40.78	40.780		
11,500.00	9,532.00	9,878.51	7,902.00	45.52	41.04	11.44	2,069.41	287.31	1,663.07	1,620.93	42.14	39.465		
11,600.00	9,532.00	9,978.51	7,902.00	46.52	42.13	11.44	2,169.41	288.15	1,663.07	1,619.55	43.52	38.214		
11,700.00	9,532.00	10,078.51	7,902.00	47.54	43.23	11.44	2,269.40	289.00	1,663.07	1,618.16	44.92	37.026		
11,800.00	9,532.00	10,178.51	7,902.00	48.58	44.36	11.44	2,369.40	289.84	1,663.07	1,616.74	46.33	35.897		
11,900.00	9,532.00	10,278.51	7,902.00	49.65	45.50	11.44	2,469.40	290.69	1,663.07	1,615.32	47.76	34.824		
12,000.00	9,532.00	10,378.51	7,902.00	50.73	46.67	11.44	2,569.39	291.54	1,663.07	1,613.88	49.20	33.804		
12,100.00	9,532.00	10,478.51	7,902.00	51.83	47.84	11.44	2,669.39	292.38	1,663.07	1,612.42	50.65	32.835		
12,200.00	9,532.00	10,578.51	7,902.00	52.95	49.03	11.44	2,769.38	293.23	1,663.07	1,610.96	52.11	31.912		
12,300.00	9,532.00	10,678.51	7,902.00	54.08	50.24	11.44	2,869.38	294.07	1,663.07	1,609.48	53.59	31.034		
12,400.00	9,532.00	10,778.51	7,902.00	55.23	51.46	11.44	2,969.38	294.92	1,663.07	1,608.00	55.07	30.198		
12,500.00	9,532.00	10,878.51	7,902.00	56.39	52.69	11.44	3,069.37	295.76	1,663.07	1,606.51	56.56	29.401		
12,600.00	9,532.00	10,978.51	7,902.00	57.56	53.93	11.44	3,169.37	296.61	1,663.07	1,605.01	58.07	28.641		
12,700.00	9,532.00	11,078.51	7,902.00	58.75	55.18	11.44	3,269.37	297.45	1,663.07	1,603.50	59.57	27.916		
12,800.00	9,532.00	11,178.51	7,902.00	59.95	56.44	11.44	3,369.36	298.30	1,663.07	1,601.98	61.09	27.224		
12,900.00	9,532.00	11,278.51	7,902.00	61.16	57.71	11.44	3,469.36	299.15	1,663.07	1,600.46	62.61	26.562		
13,000.00	9,532.00	11,378.51	7,902.00	62.38	58.99	11.44	3,569.36	299.99	1,663.07	1,598.93	64.14	25.930		
13,100.00	9,532.00	11,478.51	7,902.00	63.61	60.28	11.44	3,669.35	300.84	1,663.07	1,597.40	65.67	25.324		
13,200.00	9,532.00	11,578.51	7,902.00	64.85	61.57	11.44	3,769.35	301.68	1,663.07	1,595.86	67.21	24.745		
13,300.00	9,532.00	11,678.51	7,902.00	66.10	62.87	11.44	3,869.35	302.53	1,663.07	1,594.32	68.75	24.189		
13,400.00	9,532.00	11,778.51	7,902.00	67.36	64.18	11.44	3,969.34	303.37	1,663.07	1,592.77	70.30	23.657		
13,500.00	9,532.00	11,878.51	7,902.00	68.62	65.49	11.44	4,069.34	304.22	1,663.07	1,591.22	71.85	23.146		
13,600.00	9,532.00	11,978.51	7,902.00	69.90	66.81	11.44	4,169.33	305.07	1,663.07	1,589.66	73.41	22.655		
13,700.00	9,532.00	12,078.51	7,902.00	71.18	68.14	11.44	4,269.33	305.91	1,663.07	1,588.10	74.97	22.184		
13,800.00	9,532.00	12,178.51	7,902.00	72.46	69.47	11.44	4,369.33	306.76	1,663.07	1,586.54	76.53	21.731		
13,900.00	9,532.00	12,278.51	7,902.00	73.75	70.80	11.44	4,469.32	307.60	1,663.07	1,584.97	78.10	21.295		
14,000.00	9,532.00	12,378.51	7,902.00	75.05	72.14	11.44	4,569.32	308.45	1,663.07	1,583.40	79.67	20.875		
14,100.00	9,532.00	12,478.51	7,902.00	76.35	73.49	11.44	4,669.32	309.29	1,663.07	1,581.83	81.24	20.471		
14,200.00	9,532.00	12,578.51	7,902.00	77.66	74.83	11.44	4,769.31	310.14	1,663.07	1,580.25	82.81	20.082		
14,299.90	9,532.00	12,678.41	7,902.00	78.97	76.18	11.44	4,869.21	310.98	1,663.07	1,578.68	84.39	19.707		
14,300.90	9,532.00	12,679.41	7,902.00	78.99	76.20	11.44	4,870.21	310.99	1,663.07	1,578.67	84.40	19.704		



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 207H - OH - Preliminary Plan 1														Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM														Offset Well Error:	0.00 usft
Reference				Offset		Semi Major Axis			Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	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			
1,100.00	1,099.99	1,098.53	1,098.52	3.70	3.70	-64.04	-0.41	61.20	60.84	53.24	7.40	8.199 ES			
1,200.00	1,199.91	1,197.00	1,196.91	4.03	4.03	-66.02	-1.66	64.80	62.60	54.54	8.06	7.770			
1,266.79	1,266.57	1,262.71	1,262.50	4.25	4.26	-67.95	-2.95	68.54	64.71	56.21	8.50	7.610			
1,300.00	1,299.70	1,295.81	1,295.53	4.36	4.37	-69.00	-3.70	70.72	65.98	57.25	8.73	7.558			
1,400.00	1,399.46	1,395.67	1,395.14	4.70	4.72	-71.95	-5.97	77.30	69.91	60.50	9.41	7.426			
1,500.00	1,499.21	1,495.54	1,494.76	5.05	5.07	-74.58	-8.24	83.89	74.01	63.90	10.11	7.322			
1,600.00	1,598.97	1,595.40	1,594.38	5.40	5.43	-76.93	-10.51	90.47	78.25	67.44	10.81	7.240			
1,700.00	1,698.73	1,695.26	1,694.00	5.75	5.78	-79.03	-12.79	97.06	82.60	71.09	11.51	7.176			
1,800.00	1,798.48	1,795.12	1,793.62	6.10	6.14	-80.92	-15.06	103.64	87.06	74.84	12.22	7.124			
1,900.00	1,898.24	1,894.98	1,893.23	6.46	6.50	-82.63	-17.33	110.23	91.60	78.67	12.93	7.063			
2,000.00	1,998.00	1,994.84	1,992.85	6.82	6.86	-84.17	-19.60	116.81	96.22	82.57	13.65	7.049			
2,100.00	2,097.75	2,094.70	2,092.47	7.18	7.22	-85.57	-21.87	123.40	100.90	86.53	14.37	7.023			
2,200.00	2,197.51	2,194.57	2,192.09	7.54	7.58	-86.85	-24.15	129.98	105.63	90.54	15.09	7.001			
2,300.00	2,297.26	2,294.43	2,291.71	7.90	7.95	-88.02	-26.42	136.57	110.41	94.60	15.81	6.983			
2,400.00	2,397.02	2,394.29	2,391.33	8.26	8.31	-89.08	-28.69	143.15	115.23	98.70	16.54	6.969			
2,500.00	2,496.78	2,494.15	2,490.94	8.63	8.67	-90.07	-30.96	149.74	120.09	102.83	17.26	6.957			
2,600.00	2,596.53	2,594.01	2,590.56	8.99	9.04	-90.97	-33.23	156.32	124.99	107.00	17.99	6.948			
2,700.00	2,696.29	2,693.87	2,690.18	9.36	9.41	-91.81	-35.50	162.91	129.91	111.19	18.72	6.941			
2,800.00	2,796.05	2,792.73	2,788.78	9.72	9.77	-92.50	-37.83	169.65	135.02	115.57	19.44	6.944			
2,900.00	2,895.80	2,890.17	2,885.79	10.09	10.13	-92.50	-40.81	178.28	141.56	121.40	20.17	7.020			
3,000.00	2,995.56	2,987.33	2,982.26	10.46	10.50	-91.78	-44.58	189.20	149.81	128.92	20.89	7.170			
3,100.00	3,095.31	3,086.04	3,080.02	10.82	10.88	-90.63	-49.02	202.08	159.40	137.77	21.63	7.370			
3,200.00	3,195.07	3,185.52	3,178.53	11.19	11.26	-89.57	-53.54	215.17	169.12	146.76	22.37	7.562			
3,236.48	3,231.46	3,221.81	3,214.46	11.32	11.41	-89.21	-55.18	219.95	172.69	150.05	22.63	7.629			
3,300.00	3,294.86	3,284.98	3,277.02	11.56	11.65	-88.54	-58.05	228.26	178.91	155.81	23.10	7.745			
3,400.00	3,394.78	3,384.32	3,375.40	11.92	12.04	-86.96	-62.56	241.34	188.88	165.05	23.83	7.927			
3,500.00	3,494.76	3,483.47	3,473.58	12.26	12.43	-84.80	-67.06	254.38	199.23	174.70	24.54	8.120			
3,503.27	3,498.03	3,486.71	3,476.79	12.27	12.44	-68.63	-67.21	254.81	199.58	175.08	24.51	8.144			
3,600.00	3,594.76	3,582.50	3,571.64	12.60	12.81	71.01	-71.56	267.42	210.06	184.89	25.17	8.345			
3,700.00	3,694.76	3,681.53	3,669.71	12.93	13.20	73.22	-76.05	280.45	221.23	195.37	25.86	8.555			
3,800.00	3,794.76	3,780.55	3,767.77	13.27	13.59	75.22	-80.55	293.48	232.70	206.15	26.55	8.765			
3,900.00	3,894.76	3,879.58	3,865.83	13.61	13.99	77.03	-85.05	306.51	244.42	217.18	27.24	8.974			
4,000.00	3,994.76	3,978.60	3,963.89	13.95	14.38	78.68	-89.54	319.54	256.36	228.43	27.93	9.179			
4,100.00	4,094.76	4,077.63	4,061.96	14.29	14.77	80.18	-94.04	332.57	268.49	239.87	28.62	9.380			
4,200.00	4,194.76	4,176.66	4,160.02	14.63	15.16	81.54	-98.53	345.60	280.79	251.47	29.32	9.578			
4,300.00	4,294.76	4,275.68	4,258.08	14.97	15.56	82.80	-103.03	358.63	293.23	263.22	30.01	9.770			
4,400.00	4,394.76	4,374.71	4,356.14	15.31	15.95	83.95	-107.53	371.67	305.81	275.09	30.71	9.957			
4,500.00	4,494.76	4,473.74	4,454.20	15.66	16.35	85.01	-112.02	384.70	318.49	287.08	31.41	10.140			
4,600.00	4,594.76	4,572.76	4,552.27	16.00	16.74	85.99	-116.52	397.73	331.27	299.16	32.11	10.317			
4,700.00	4,694.76	4,671.79	4,650.33	16.35	17.14	86.89	-121.01	410.76	344.14	311.33	32.81	10.489			
4,800.00	4,794.76	4,770.81	4,748.39	16.69	17.53	87.73	-125.51	423.79	357.09	323.58	33.51	10.655			

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Charlie Sweeney Federal 31-23S-28E - 207H - OH - Preliminary Plan 1													Offset Well Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM														
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.00	4,894.76	4,878.92	4,855.61	17.04	17.96	88.51	-129.99	436.79	368.99	334.75	34.25	10.774		
5,000.00	4,994.76	4,988.49	4,964.65	17.38	18.38	89.09	-133.53	447.04	378.28	343.30	34.99	10.812		
5,100.00	5,094.76	5,098.61	5,074.48	17.73	18.79	89.48	-136.05	454.35	384.90	349.17	35.73	10.773		
5,200.00	5,194.76	5,209.07	5,184.85	18.08	19.18	89.71	-137.55	458.68	388.81	352.35	36.47	10.662		
5,300.00	5,294.76	5,319.00	5,294.76	18.43	19.56	89.78	-138.00	460.00	390.00	352.80	37.20	10.483		
5,400.00	5,394.76	5,419.00	5,394.76	18.77	19.89	89.78	-138.00	460.00	390.00	352.12	37.89	10.294		
5,500.00	5,494.76	5,519.00	5,494.76	19.12	20.22	89.78	-138.00	460.00	390.00	351.43	38.57	10.111		
5,600.00	5,594.76	5,619.00	5,594.76	19.47	20.55	89.78	-138.00	460.00	390.00	350.74	39.26	9.934		
5,700.00	5,694.76	5,719.00	5,694.76	19.82	20.88	89.78	-138.00	460.00	390.00	350.06	39.95	9.763		
5,800.00	5,794.76	5,819.00	5,794.76	20.17	21.21	89.78	-138.00	460.00	390.00	349.37	40.64	9.597		
5,900.00	5,894.76	5,919.00	5,894.76	20.52	21.54	89.78	-138.00	460.00	390.00	348.68	41.33	9.437		
6,000.00	5,994.76	6,019.00	5,994.76	20.87	21.87	89.78	-138.00	460.00	390.00	347.99	42.02	9.282		
6,100.00	6,094.76	6,119.00	6,094.76	21.22	22.21	89.78	-138.00	460.00	390.00	347.29	42.71	9.132		
6,200.00	6,194.76	6,219.00	6,194.76	21.57	22.54	89.78	-138.00	460.00	390.00	346.60	43.40	8.986		
6,300.00	6,294.76	6,319.00	6,294.76	21.92	22.87	89.78	-138.00	460.00	390.00	345.91	44.10	8.845		
6,400.00	6,394.76	6,419.00	6,394.76	22.27	23.21	89.78	-138.00	460.00	390.00	345.21	44.79	8.708		
6,500.00	6,494.76	6,519.00	6,494.76	22.63	23.55	89.78	-138.00	460.00	390.00	344.52	45.48	8.575		
6,600.00	6,594.76	6,619.00	6,594.76	22.98	23.88	89.78	-138.00	460.00	390.00	343.82	46.18	8.445		
6,700.00	6,694.76	6,719.00	6,694.76	23.33	24.22	89.78	-138.00	460.00	390.00	343.13	46.88	8.320		
6,800.00	6,794.76	6,819.00	6,794.76	23.68	24.56	89.78	-138.00	460.00	390.00	342.43	47.57	8.198		
6,900.00	6,894.76	6,919.00	6,894.76	24.03	24.90	89.78	-138.00	460.00	390.00	341.73	48.27	8.080		
7,000.00	6,994.76	7,019.00	6,994.76	24.39	25.24	89.78	-138.00	460.00	390.00	341.04	48.97	7.965		
7,100.00	7,094.76	7,119.00	7,094.76	24.74	25.58	89.78	-138.00	460.00	390.00	340.34	49.67	7.853		
7,200.00	7,194.76	7,219.00	7,194.76	25.09	25.92	89.78	-138.00	460.00	390.00	339.64	50.36	7.744		
7,300.00	7,294.76	7,319.00	7,294.76	25.44	26.26	89.78	-138.00	460.00	390.00	338.94	51.06	7.638		
7,400.00	7,394.76	7,419.00	7,394.76	25.80	26.60	89.78	-138.00	460.00	390.00	338.24	51.76	7.534		
7,500.00	7,494.76	7,519.00	7,494.76	26.15	26.94	89.78	-138.00	460.00	390.00	337.54	52.46	7.434		
7,600.00	7,594.76	7,619.00	7,594.76	26.50	27.29	89.78	-138.00	460.00	390.00	336.84	53.16	7.336		
7,700.00	7,694.76	7,719.00	7,694.76	26.86	27.63	89.78	-138.00	460.00	390.00	336.14	53.87	7.240		
7,800.00	7,794.76	7,819.00	7,794.76	27.21	27.97	89.78	-138.00	460.00	390.00	335.44	54.57	7.147		
7,900.00	7,894.76	7,919.00	7,894.76	27.57	28.31	89.78	-138.00	460.00	390.00	334.73	55.27	7.056		
8,000.00	7,994.76	8,019.00	7,994.76	27.92	28.66	89.78	-138.00	460.00	390.00	334.03	55.97	6.968		
8,100.00	8,094.76	8,119.00	8,094.76	28.27	29.00	89.78	-138.00	460.00	390.00	333.33	56.67	6.881		
8,200.00	8,194.76	8,219.00	8,194.76	28.63	29.35	89.78	-138.00	460.00	390.00	332.63	57.38	6.797		
8,300.00	8,294.76	8,319.00	8,294.76	28.98	29.69	89.78	-138.00	460.00	390.00	331.92	58.08	6.715		
8,400.00	8,394.76	8,419.00	8,394.76	29.34	30.04	89.78	-138.00	460.00	390.00	331.22	58.78	6.634		
8,500.00	8,494.76	8,519.00	8,494.76	29.69	30.38	89.78	-138.00	460.00	390.00	330.51	59.49	6.556		
8,600.00	8,594.76	8,619.00	8,594.76	30.05	30.73	89.78	-138.00	460.00	390.00	329.81	60.19	6.479		
8,700.00	8,694.76	8,719.00	8,694.76	30.40	31.07	89.78	-138.00	460.00	390.00	329.11	60.90	6.404		
8,800.00	8,794.76	8,819.00	8,794.76	30.75	31.42	89.78	-138.00	460.00	390.00	328.40	61.60	6.331		
8,900.00	8,894.76	8,919.00	8,894.76	31.11	31.77	89.78	-138.00	460.00	390.00	327.70	62.31	6.259		
8,951.27	8,946.03	8,970.26	8,946.03	31.29	31.95	89.78	-138.00	460.00	390.00	327.33	62.67	6.223		
9,000.00	8,994.71	9,013.70	8,989.42	31.46	32.10	98.43	-136.38	460.29	390.64	327.61	63.02	6.198		
9,050.00	9,044.28	9,058.24	9,033.66	31.63	32.25	98.33	-131.36	461.18	392.61	329.29	63.32	6.201		
9,100.00	9,093.10	9,102.75	9,077.34	31.80	32.40	98.16	-122.99	462.67	395.89	332.29	63.60	6.225		
9,150.00	9,140.80	9,147.20	9,120.17	31.96	32.54	97.92	-111.32	464.75	400.47	336.61	63.87	6.271		
9,200.00	9,187.02	9,191.59	9,161.90	32.12	32.68	97.62	-96.43	467.40	406.31	342.19	64.13	6.336		
9,250.00	9,231.41	9,235.92	9,202.27	32.27	32.81	97.25	-78.45	470.61	413.37	348.99	64.38	6.421		
9,300.00	9,273.63	9,280.17	9,241.04	32.41	32.93	96.82	-57.48	474.34	421.59	356.96	64.63	6.523		
9,350.00	9,313.35	9,324.35	9,278.01	32.55	33.04	96.34	-33.67	478.58	430.92	366.04	64.89	6.641		
9,400.00	9,350.28	9,368.49	9,312.96	32.69	33.14	95.79	-7.15	483.31	441.29	376.15	65.15	6.774		
9,450.00	9,384.13	9,412.60	9,345.71	32.82	33.24	95.19	21.91	488.48	452.63	387.22	65.42	6.919		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 207H - OH - Preliminary Plan 1 **Offset Site Error:** 0.00 usft
Survey Program: O-PHX+MWD+HDGM **Offset Well Error:** 0.00 usft

Reference		Offset		Semi Major Axis		Highside Tooface (")	Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,500.00	9,414.64	9,456.70	9,376.10	32.96	33.32	94.54	53.37	494.09	464.86	399.17	65.69	7.076	
9,550.00	9,441.59	9,500.00	9,403.46	33.10	33.40	93.83	86.40	499.97	477.89	411.92	65.97	7.244	
9,600.00	9,464.77	9,545.07	9,429.15	33.24	33.47	93.11	122.84	506.46	491.64	425.38	66.27	7.419	
9,650.00	9,484.00	9,589.44	9,451.53	33.39	33.55	92.34	160.54	513.18	506.02	439.46	66.56	7.603	
9,700.00	9,499.14	9,634.01	9,470.97	33.54	33.63	91.55	200.02	520.21	520.92	454.07	66.85	7.792	
9,701.27	9,499.46	9,635.14	9,471.42	33.55	33.63	91.53	201.04	520.39	521.30	454.45	66.86	7.797	
9,750.00	9,510.87	9,678.96	9,487.35	33.70	33.73	91.29	241.22	527.55	536.24	469.12	67.12	7.989	
9,800.00	9,520.05	9,724.44	9,500.54	33.87	33.85	90.87	284.05	535.18	551.85	484.45	67.40	8.187	
9,850.00	9,526.64	9,770.74	9,511.23	34.04	33.98	90.39	328.40	543.08	567.65	499.95	67.70	8.385	
9,900.00	9,530.63	9,817.21	9,519.76	34.23	34.12	89.91	373.37	551.09	583.58	515.57	68.01	8.581	
9,951.27	9,532.00	9,865.05	9,526.21	34.43	34.27	89.42	420.03	559.40	600.00	531.67	68.33	8.780	
10,000.00	9,532.00	9,911.03	9,530.17	34.63	34.42	89.82	465.13	567.43	615.08	546.42	68.66	8.959	
10,100.00	9,532.00	10,025.84	9,532.00	35.07	34.84	90.00	578.25	586.76	641.79	572.33	69.47	9.239	
10,200.00	9,532.00	10,175.57	9,532.00	35.56	35.45	90.00	727.07	602.90	657.28	586.74	70.54	9.317	
10,256.75	9,532.00	10,262.09	9,532.00	35.85	35.84	90.00	813.49	606.89	660.26	589.02	71.24	9.288	
10,300.00	9,532.00	10,315.32	9,532.00	36.07	36.10	90.00	866.72	607.55	660.40	588.68	71.72	9.207	
10,400.00	9,532.00	10,415.32	9,532.00	36.64	36.62	90.00	966.72	608.38	660.39	587.58	72.81	9.070	
10,500.00	9,532.00	10,515.32	9,532.00	37.25	37.18	90.00	1,066.72	609.22	660.38	586.39	73.99	8.925	
10,600.00	9,532.00	10,615.32	9,532.00	37.91	37.79	90.00	1,166.71	610.06	660.37	585.10	75.26	8.774	
10,700.00	9,532.00	10,715.32	9,532.00	38.61	38.45	90.00	1,266.71	610.89	660.36	583.73	76.63	8.618	
10,800.00	9,532.00	10,815.32	9,532.00	39.35	39.15	90.00	1,366.71	611.73	660.35	582.27	78.08	8.458	
10,900.00	9,532.00	10,915.32	9,532.00	40.13	39.88	90.00	1,466.70	612.56	660.34	580.73	79.61	8.295	
11,000.00	9,532.00	11,015.32	9,532.00	40.95	40.66	90.00	1,566.70	613.40	660.33	579.12	81.21	8.131	
11,100.00	9,532.00	11,115.32	9,532.00	41.81	41.47	90.00	1,666.70	614.23	660.32	577.43	82.88	7.967	
11,200.00	9,532.00	11,215.32	9,532.00	42.69	42.32	90.00	1,766.69	615.07	660.31	575.68	84.62	7.803	
11,300.00	9,532.00	11,315.32	9,532.00	43.61	43.20	90.00	1,866.69	615.90	660.30	573.87	86.43	7.640	
11,400.00	9,532.00	11,415.32	9,532.00	44.55	44.11	90.00	1,966.69	616.74	660.29	572.00	88.29	7.479	
11,500.00	9,532.00	11,515.32	9,532.00	45.52	45.05	90.00	2,066.68	617.58	660.28	570.07	90.21	7.319	
11,600.00	9,532.00	11,615.32	9,532.00	46.52	46.02	90.00	2,166.68	618.41	660.27	568.09	92.18	7.163	
11,700.00	9,532.00	11,715.32	9,532.00	47.54	47.01	90.00	2,266.68	619.25	660.26	566.06	94.20	7.009	
11,800.00	9,532.00	11,815.32	9,532.00	48.58	48.02	90.00	2,366.67	620.08	660.25	563.99	96.26	6.859	
11,900.00	9,532.00	11,915.32	9,532.00	49.65	49.05	90.00	2,466.67	620.92	660.24	561.87	98.37	6.712	
12,000.00	9,532.00	12,015.32	9,532.00	50.73	50.11	90.00	2,566.67	621.75	660.23	559.72	100.51	6.569	
12,100.00	9,532.00	12,115.32	9,532.00	51.83	51.19	90.00	2,666.66	622.59	660.22	557.52	102.69	6.429	
12,200.00	9,532.00	12,215.32	9,532.00	52.95	52.28	90.00	2,766.66	623.42	660.21	555.29	104.91	6.293	
12,300.00	9,532.00	12,315.32	9,532.00	54.08	53.39	90.00	2,866.65	624.26	660.20	553.03	107.16	6.161	
12,400.00	9,532.00	12,415.32	9,532.00	55.23	54.52	90.00	2,966.65	625.10	660.19	550.74	109.45	6.032	
12,500.00	9,532.00	12,515.32	9,532.00	56.39	55.66	90.00	3,066.65	625.93	660.18	548.42	111.76	5.907	
12,600.00	9,532.00	12,615.32	9,532.00	57.56	56.82	90.00	3,166.64	626.77	660.17	546.07	114.09	5.786	
12,700.00	9,532.00	12,715.32	9,532.00	58.75	57.99	90.00	3,266.64	627.60	660.16	543.70	116.46	5.669	
12,800.00	9,532.00	12,815.32	9,532.00	59.95	59.17	90.00	3,366.64	628.44	660.15	541.30	118.85	5.555	
12,900.00	9,532.00	12,915.32	9,532.00	61.16	60.36	90.00	3,466.63	629.27	660.14	538.88	121.26	5.444	
13,000.00	9,532.00	13,015.32	9,532.00	62.38	61.57	90.00	3,566.63	630.11	660.13	536.44	123.69	5.337	
13,100.00	9,532.00	13,115.32	9,532.00	63.61	62.79	90.00	3,666.63	630.94	660.12	533.98	126.14	5.233	
13,200.00	9,532.00	13,215.32	9,532.00	64.85	64.01	90.00	3,766.62	631.78	660.11	531.49	128.61	5.133	
13,300.00	9,532.00	13,315.32	9,532.00	66.10	65.25	90.00	3,866.62	632.62	660.10	529.00	131.10	5.035	
13,400.00	9,532.00	13,415.32	9,532.00	67.36	66.49	90.00	3,966.62	633.45	660.09	526.48	133.61	4.941	
13,500.00	9,532.00	13,515.32	9,532.00	68.62	67.74	90.00	4,066.61	634.29	660.07	523.95	136.13	4.849	
13,600.00	9,532.00	13,615.32	9,532.00	69.90	69.00	90.00	4,166.61	635.12	660.06	521.40	138.66	4.760	
13,700.00	9,532.00	13,715.32	9,532.00	71.18	70.27	90.00	4,266.61	635.96	660.05	518.84	141.21	4.674	
13,800.00	9,532.00	13,815.32	9,532.00	72.46	71.54	90.00	4,366.60	636.79	660.04	516.27	143.78	4.591	
13,900.00	9,532.00	13,915.32	9,532.00	73.75	72.83	90.00	4,466.60	637.63	660.03	513.68	146.35	4.510	

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



Phoenix Technology Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 207H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	9,532.00	14,015.32	9,532.00	75.05	74.11	90.00	4,566.60	638.46	660.02	511.08	148.94	4.431		
14,100.00	9,532.00	14,115.32	9,532.00	76.35	75.41	90.00	4,666.59	639.30	660.01	508.47	151.54	4.355		
14,200.00	9,532.00	14,215.32	9,532.00	77.66	76.71	90.00	4,766.59	640.14	660.00	505.85	154.16	4.281		
14,299.90	9,532.00	14,315.22	9,532.00	78.97	78.01	90.00	4,866.49	640.97	659.99	503.22	156.77	4.210		
14,300.90	9,532.00	14,316.22	9,532.00	78.99	78.02	90.00	4,867.48	640.98	659.99	503.20	156.80	4.209 SF		



Phoenix Technology Services
Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 223H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	3.00	0.00	0.00	0.00	-90.00	0.00	-30.00	30.00					
100.00	100.00	103.00	100.00	0.13	0.14	-90.00	0.00	-30.00	30.00	29.73	0.27	110.846		
200.00	200.00	203.00	200.00	0.49	0.50	-90.00	0.00	-30.00	30.00	29.01	0.99	30.377		
300.00	300.00	303.00	300.00	0.85	0.86	-90.00	0.00	-30.00	30.00	28.30	1.70	17.600		
400.00	400.00	403.00	400.00	1.21	1.22	-90.00	0.00	-30.00	30.00	27.58	2.42	12.389		
500.00	500.00	503.00	500.00	1.56	1.57	-90.00	0.00	-30.00	30.00	26.86	3.14	9.559		
600.00	600.00	603.00	600.00	1.92	1.93	-90.00	0.00	-30.00	30.00	26.14	3.86	7.781		
700.00	700.00	703.00	700.00	2.28	2.29	-90.00	0.00	-30.00	30.00	25.43	4.57	6.561		
800.00	800.00	803.00	800.00	2.64	2.65	-90.00	0.00	-30.00	30.00	24.71	5.29	5.672		
900.00	900.00	903.00	900.00	3.00	3.01	-90.00	0.00	-30.00	30.00	23.99	6.01	4.995		
965.64	965.64	968.64	965.64	3.23	3.24	-90.00	0.00	-30.00	30.00	23.52	6.48	4.632 CC		
1,000.00	1,000.00	1,002.99	999.99	3.36	3.37	-90.00	0.00	-30.00	30.00	23.28	6.72	4.463 ES		
1,100.00	1,099.99	1,102.82	1,099.80	3.70	3.71	116.29	-1.35	-30.30	30.89	23.48	7.40	4.172		
1,200.00	1,199.91	1,202.59	1,199.49	4.03	4.03	115.62	-5.24	-31.16	33.52	25.46	8.06	4.159		
1,266.79	1,266.57	1,269.18	1,265.96	4.25	4.26	115.06	-9.26	-32.05	36.24	27.74	8.50	4.263		
1,300.00	1,299.70	1,302.36	1,299.06	4.36	4.37	114.84	-11.51	-32.55	37.79	29.06	8.73	4.331		
1,400.00	1,399.46	1,402.25	1,398.70	4.70	4.71	114.26	-18.31	-34.05	42.44	33.04	9.40	4.513		
1,500.00	1,499.21	1,502.14	1,498.35	5.05	5.05	113.80	-25.11	-35.56	47.10	37.01	10.09	4.667		
1,600.00	1,598.97	1,602.03	1,598.00	5.40	5.40	113.43	-31.90	-37.06	51.75	40.97	10.79	4.798		
1,700.00	1,698.73	1,701.92	1,697.65	5.75	5.75	113.11	-38.70	-38.57	56.41	44.93	11.49	4.911		
1,800.00	1,798.48	1,801.81	1,797.30	6.10	6.10	112.85	-45.50	-40.07	61.08	48.88	12.19	5.009		
1,900.00	1,898.24	1,901.70	1,896.94	6.46	6.46	112.62	-52.29	-41.58	65.74	52.84	12.90	5.095		
2,000.00	1,998.00	2,001.60	1,996.59	6.82	6.81	112.42	-59.09	-43.08	70.40	56.79	13.62	5.171		
2,100.00	2,097.75	2,101.49	2,096.24	7.18	7.17	112.25	-65.89	-44.59	75.07	60.74	14.33	5.238		
2,200.00	2,197.51	2,201.38	2,195.89	7.54	7.53	112.10	-72.69	-46.09	79.73	64.68	15.05	5.297		
2,300.00	2,297.26	2,301.27	2,295.54	7.90	7.89	111.96	-79.48	-47.60	84.40	68.63	15.77	5.351		
2,400.00	2,397.02	2,401.16	2,395.18	8.26	8.26	111.84	-86.28	-49.10	89.06	72.57	16.50	5.399		
2,500.00	2,496.78	2,501.05	2,494.83	8.63	8.62	111.73	-93.08	-50.61	93.73	76.51	17.22	5.443		
2,600.00	2,596.53	2,600.94	2,594.48	8.99	8.98	111.63	-99.87	-52.11	98.40	80.45	17.95	5.483		
2,700.00	2,696.29	2,700.83	2,694.13	9.36	9.35	111.54	-106.67	-53.62	103.06	84.39	18.67	5.519		
2,800.00	2,796.05	2,800.72	2,793.78	9.72	9.71	111.46	-113.47	-55.12	107.73	88.33	19.40	5.552		
2,900.00	2,895.80	2,900.61	2,893.42	10.09	10.08	111.38	-120.26	-56.63	112.40	92.27	20.13	5.583		
3,000.00	2,995.56	3,000.50	2,993.07	10.46	10.44	111.31	-127.06	-58.13	117.07	96.20	20.86	5.611		
3,100.00	3,095.31	3,100.82	3,093.16	10.82	10.81	111.36	-133.65	-59.59	121.66	100.06	21.60	5.634		
3,200.00	3,195.07	3,201.68	3,193.92	11.19	11.18	112.37	-138.09	-60.58	125.60	103.28	22.33	5.626		
3,236.48	3,231.46	3,238.46	3,230.68	11.32	11.31	113.01	-139.07	-60.79	126.86	104.28	22.59	5.616		
3,300.00	3,294.86	3,302.46	3,294.68	11.56	11.53	114.27	-139.94	-60.99	128.67	105.62	23.05	5.582		
3,400.00	3,394.78	3,402.56	3,394.78	11.92	11.87	115.87	-140.00	-61.00	130.39	106.64	23.75	5.490		
3,500.00	3,494.76	3,502.55	3,494.76	12.26	12.21	116.43	-140.00	-61.00	131.00	106.57	24.43	5.363		
3,503.27	3,498.03	3,505.82	3,498.03	12.27	12.22	-90.21	-140.00	-61.00	131.00	106.57	24.44	5.361		
3,600.00	3,594.76	3,602.55	3,594.76	12.60	12.54	-90.21	-140.00	-61.00	131.00	105.92	25.09	5.222		
3,700.00	3,694.76	3,702.55	3,694.76	12.93	12.88	-90.21	-140.00	-61.00	131.00	105.24	25.76	5.085		
3,800.00	3,794.76	3,802.55	3,794.76	13.27	13.22	-90.21	-140.00	-61.00	131.00	104.56	26.44	4.955		
3,900.00	3,894.76	3,902.55	3,894.76	13.61	13.56	-90.21	-140.00	-61.00	131.00	103.88	27.12	4.831		
4,000.00	3,994.76	4,002.55	3,994.76	13.95	13.90	-90.21	-140.00	-61.00	131.00	103.20	27.80	4.713		
4,100.00	4,094.76	4,102.55	4,094.76	14.29	14.24	-90.21	-140.00	-61.00	131.00	102.52	28.48	4.600		
4,200.00	4,194.76	4,202.55	4,194.76	14.63	14.58	-90.21	-140.00	-61.00	131.00	101.84	29.16	4.492		
4,300.00	4,294.76	4,302.55	4,294.76	14.97	14.93	-90.21	-140.00	-61.00	131.00	101.15	29.85	4.389		
4,400.00	4,394.76	4,402.55	4,394.76	15.31	15.27	-90.21	-140.00	-61.00	131.00	100.46	30.54	4.290		
4,500.00	4,494.76	4,502.55	4,494.76	15.66	15.61	-90.21	-140.00	-61.00	131.00	99.78	31.23	4.195		
4,600.00	4,594.76	4,602.55	4,594.76	16.00	15.96	-90.21	-140.00	-61.00	131.00	99.09	31.92	4.105		
4,700.00	4,694.76	4,702.55	4,694.76	16.35	16.31	-90.21	-140.00	-61.00	131.00	98.39	32.61	4.018		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 223H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toofface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.00	4,794.76	4,802.55	4,794.76	16.69	16.65	-90.21	-140.00	-61.00	131.00	97.70	33.30	3.934		
4,900.00	4,894.76	4,902.55	4,894.76	17.04	17.00	-90.21	-140.00	-61.00	131.00	97.01	33.99	3.854		
5,000.00	4,994.76	5,002.55	4,994.76	17.38	17.35	-90.21	-140.00	-61.00	131.00	96.31	34.69	3.777		
5,100.00	5,094.76	5,102.55	5,094.76	17.73	17.69	-90.21	-140.00	-61.00	131.00	95.62	35.38	3.703		
5,200.00	5,194.76	5,202.55	5,194.76	18.08	18.04	-90.21	-140.00	-61.00	131.00	94.92	36.08	3.631		
5,300.00	5,294.76	5,302.55	5,294.76	18.43	18.39	-90.21	-140.00	-61.00	131.00	94.23	36.77	3.562		
5,400.00	5,394.76	5,402.55	5,394.76	18.77	18.74	-90.21	-140.00	-61.00	131.00	93.53	37.47	3.496		
5,500.00	5,494.76	5,502.55	5,494.76	19.12	19.09	-90.21	-140.00	-61.00	131.00	92.83	38.17	3.432		
5,600.00	5,594.76	5,602.55	5,594.76	19.47	19.44	-90.21	-140.00	-61.00	131.00	92.13	38.87	3.370		
5,700.00	5,694.76	5,702.55	5,694.76	19.82	19.79	-90.21	-140.00	-61.00	131.00	91.43	39.57	3.311		
5,800.00	5,794.76	5,802.55	5,794.76	20.17	20.14	-90.21	-140.00	-61.00	131.00	90.73	40.27	3.253		
5,900.00	5,894.76	5,902.55	5,894.76	20.52	20.49	-90.21	-140.00	-61.00	131.00	90.03	40.97	3.198		
6,000.00	5,994.76	6,002.55	5,994.76	20.87	20.84	-90.21	-140.00	-61.00	131.00	89.33	41.67	3.144		
6,100.00	6,094.76	6,102.55	6,094.76	21.22	21.19	-90.21	-140.00	-61.00	131.00	88.63	42.37	3.092		
6,200.00	6,194.76	6,202.55	6,194.76	21.57	21.54	-90.21	-140.00	-61.00	131.00	87.93	43.07	3.041		
6,300.00	6,294.76	6,302.55	6,294.76	21.92	21.89	-90.21	-140.00	-61.00	131.00	87.22	43.78	2.992		
6,400.00	6,394.76	6,402.55	6,394.76	22.27	22.25	-90.21	-140.00	-61.00	131.00	86.52	44.48	2.945		
6,500.00	6,494.76	6,502.55	6,494.76	22.63	22.60	-90.21	-140.00	-61.00	131.00	85.82	45.18	2.899		
6,600.00	6,594.76	6,602.55	6,594.76	22.98	22.95	-90.21	-140.00	-61.00	131.00	85.11	45.89	2.855		
6,700.00	6,694.76	6,702.55	6,694.76	23.33	23.30	-90.21	-140.00	-61.00	131.00	84.41	46.59	2.812		
6,800.00	6,794.76	6,802.55	6,794.76	23.68	23.65	-90.21	-140.00	-61.00	131.00	83.70	47.30	2.770		
6,900.00	6,894.76	6,902.55	6,894.76	24.03	24.01	-90.21	-140.00	-61.00	131.00	83.00	48.00	2.729		
7,000.00	6,994.76	7,002.55	6,994.76	24.39	24.36	-90.21	-140.00	-61.00	131.00	82.29	48.71	2.690		
7,100.00	7,094.76	7,102.55	7,094.76	24.74	24.71	-90.21	-140.00	-61.00	131.00	81.59	49.41	2.651		
7,200.00	7,194.76	7,202.55	7,194.76	25.09	25.07	-90.21	-140.00	-61.00	131.00	80.88	50.12	2.614		
7,300.00	7,294.76	7,302.55	7,294.76	25.44	25.42	-90.21	-140.00	-61.00	131.00	80.17	50.83	2.577		
7,400.00	7,394.76	7,402.55	7,394.76	25.80	25.77	-90.21	-140.00	-61.00	131.00	79.47	51.53	2.542		
7,500.00	7,494.76	7,502.55	7,494.76	26.15	26.13	-90.21	-140.00	-61.00	131.00	78.76	52.24	2.508		
7,600.00	7,594.76	7,602.55	7,594.76	26.50	26.48	-90.21	-140.00	-61.00	131.00	78.05	52.95	2.474		
7,700.00	7,694.76	7,702.55	7,694.76	26.86	26.83	-90.21	-140.00	-61.00	131.00	77.35	53.65	2.442		
7,800.00	7,794.76	7,802.55	7,794.76	27.21	27.19	-90.21	-140.00	-61.00	131.00	76.64	54.36	2.410		
7,900.00	7,894.76	7,902.55	7,894.76	27.57	27.54	-90.21	-140.00	-61.00	131.00	75.93	55.07	2.379		
8,000.00	7,994.76	8,002.55	7,994.76	27.92	27.90	-90.21	-140.00	-61.00	131.00	75.22	55.78	2.349		
8,100.00	8,094.76	8,102.55	8,094.76	28.27	28.25	-90.21	-140.00	-61.00	131.00	74.51	56.49	2.319		
8,200.00	8,194.76	8,202.55	8,194.76	28.63	28.61	-90.21	-140.00	-61.00	131.00	73.80	57.20	2.290		
8,300.00	8,294.76	8,302.55	8,294.76	28.98	28.96	-90.21	-140.00	-61.00	131.00	73.10	57.90	2.262		
8,400.00	8,394.76	8,402.55	8,394.76	29.34	29.31	-90.21	-140.00	-61.00	131.00	72.39	58.61	2.235		
8,500.00	8,494.76	8,502.55	8,494.76	29.69	29.67	-90.21	-140.00	-61.00	131.00	71.68	59.32	2.208		
8,600.00	8,594.76	8,602.55	8,594.76	30.05	30.02	-90.21	-140.00	-61.00	131.00	70.97	60.03	2.182		
8,700.00	8,694.76	8,702.55	8,694.76	30.40	30.38	-90.21	-140.00	-61.00	131.00	70.26	60.74	2.157		
8,800.00	8,794.76	8,802.55	8,794.76	30.75	30.73	-90.21	-140.00	-61.00	131.00	69.55	61.45	2.132		
8,900.00	8,894.76	8,902.55	8,894.76	31.11	31.09	-90.21	-140.00	-61.00	131.00	68.84	62.16	2.107		
8,951.27	8,946.03	8,953.82	8,946.03	31.29	31.27	-90.21	-140.00	-61.00	131.00	68.47	62.53	2.095		
9,000.00	8,994.71	9,002.49	8,994.71	31.46	31.44	-82.46	-140.00	-61.00	130.71	67.84	62.87	2.079		
9,050.00	9,044.28	9,052.06	9,044.28	31.63	31.62	-85.31	-140.00	-61.00	130.02	66.80	63.22	2.057		
9,100.00	9,093.10	9,100.89	9,093.10	31.80	31.79	-89.96	-140.00	-61.00	129.57	66.00	63.57	2.038		
9,100.34	9,093.43	9,101.22	9,093.43	31.80	31.79	-90.00	-140.00	-61.00	129.57	66.00	63.57	2.038 SF		
9,150.00	9,140.80	9,148.59	9,140.80	31.96	31.96	-96.15	-140.00	-61.00	130.42	66.56	63.86	2.042		
9,200.00	9,187.02	9,194.81	9,187.02	32.12	32.13	-103.34	-140.00	-61.00	133.93	69.99	63.94	2.095		
9,250.00	9,231.41	9,239.20	9,231.41	32.27	32.28	-110.83	-140.00	-61.00	141.49	77.90	63.59	2.225		
9,300.00	9,273.63	9,281.41	9,273.63	32.41	32.43	-117.90	-140.00	-61.00	154.21	91.53	62.68	2.460		
9,350.00	9,313.35	9,321.14	9,313.35	32.55	32.58	-124.02	-140.00	-61.00	172.55	111.34	61.21	2.819		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 223H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis			Distance			Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,400.00	9,350.28	9,358.06	9,350.28	32.69	32.71	-128.92	-140.00	-61.00	196.43	137.10	59.33	3.311		
9,450.00	9,384.13	9,391.91	9,384.13	32.82	32.83	-132.53	-140.00	-61.00	225.38	168.10	57.28	3.935		
9,500.00	9,414.64	9,422.43	9,414.64	32.96	32.94	-134.85	-140.00	-61.00	258.78	203.48	55.30	4.680		
9,550.00	9,441.59	9,449.38	9,441.59	33.10	33.03	-135.87	-140.00	-61.00	295.97	242.29	53.68	5.513		
9,600.00	9,464.77	9,472.56	9,464.77	33.24	33.11	-135.49	-140.00	-61.00	336.34	283.57	52.77	6.373		
9,650.00	9,484.00	9,491.79	9,484.00	33.39	33.18	-133.43	-140.00	-61.00	379.34	326.34	53.00	7.157		
9,700.00	9,499.14	9,506.92	9,499.14	33.54	33.24	-129.14	-140.00	-61.00	424.42	369.57	54.85	7.738		
9,701.27	9,499.46	9,507.25	9,499.46	33.55	33.24	-129.00	-140.00	-61.00	425.59	370.67	54.92	7.749		
9,750.00	9,510.87	9,518.66	9,510.87	33.70	33.28	-126.17	-140.00	-61.00	470.93	414.54	56.39	8.352		
9,800.00	9,520.05	9,527.83	9,520.05	33.87	33.31	-121.43	-140.00	-61.00	518.36	459.46	58.90	8.801		
9,850.00	9,526.64	9,534.43	9,526.64	34.04	33.33	-114.25	-140.00	-61.00	566.48	504.19	62.29	9.094		
9,900.00	9,530.63	9,538.41	9,530.63	34.23	33.35	-103.98	-140.00	-61.00	615.10	549.25	65.84	9.342		
9,951.27	9,532.00	9,539.79	9,532.00	34.43	33.35	-90.00	-140.00	-61.00	665.28	597.50	67.77	9.816		
10,000.00	9,532.00	9,539.79	9,532.00	34.63	33.35	-90.00	-140.00	-61.00	713.25	645.27	67.97	10.493		
10,100.00	9,532.00	10,859.45	10,297.00	35.07	37.39	-179.54	672.42	-54.19	765.02	737.35	27.68	27.642		
10,200.00	9,532.00	10,959.28	10,297.00	35.56	37.80	-179.96	772.25	-53.36	765.00	736.67	28.33	26.999		
10,222.18	9,532.00	10,981.45	10,297.00	35.67	37.90	180.00	794.42	-53.17	765.00	736.51	28.49	26.851		
10,256.75	9,532.00	11,016.03	10,297.00	35.85	38.05	179.98	828.99	-52.88	765.00	736.26	28.74	26.617		
10,300.00	9,532.00	11,059.27	10,297.00	36.07	38.26	179.98	872.24	-52.52	765.00	735.93	29.07	26.317		
10,400.00	9,532.00	11,159.27	10,297.00	36.64	38.78	179.98	972.24	-51.68	765.00	735.13	29.87	25.613		
10,500.00	9,532.00	11,259.27	10,297.00	37.25	39.34	179.98	1,072.23	-50.84	765.00	734.27	30.73	24.897		
10,600.00	9,532.00	11,359.27	10,297.00	37.91	39.94	179.98	1,172.23	-50.00	765.00	733.36	31.64	24.179		
10,700.00	9,532.00	11,459.27	10,297.00	38.61	40.59	179.98	1,272.23	-49.17	765.00	732.40	32.60	23.465		
10,800.00	9,532.00	11,559.27	10,297.00	39.35	41.28	179.98	1,372.22	-48.33	765.00	731.39	33.61	22.761		
10,900.00	9,532.00	11,659.27	10,297.00	40.13	42.00	179.98	1,472.22	-47.49	765.00	730.34	34.66	22.071		
11,000.00	9,532.00	11,759.27	10,297.00	40.95	42.77	179.98	1,572.22	-46.65	765.00	729.25	35.75	21.399		
11,099.37	9,532.00	11,858.64	10,297.00	41.80	43.56	179.98	1,671.58	-45.82	765.00	728.14	36.86	20.752		
11,100.00	9,532.00	11,859.27	10,297.00	41.81	43.57	179.98	1,672.21	-45.81	765.00	728.13	36.87	20.748		
11,200.00	9,532.00	11,959.27	10,297.00	42.69	44.40	179.98	1,772.21	-44.98	765.00	726.97	38.03	20.118		
11,300.00	9,532.00	12,059.27	10,297.00	43.61	45.27	179.98	1,872.21	-44.14	765.00	725.79	39.21	19.511		
11,400.00	9,532.00	12,159.27	10,297.00	44.55	46.16	179.98	1,972.20	-43.30	765.00	724.58	40.42	18.927		
11,500.00	9,532.00	12,259.27	10,297.00	45.52	47.08	179.98	2,072.20	-42.46	765.00	723.35	41.65	18.367		
11,600.00	9,532.00	12,359.27	10,297.00	46.52	48.03	179.98	2,172.19	-41.62	765.00	722.09	42.91	17.829		
11,700.00	9,532.00	12,459.27	10,297.00	47.54	49.00	179.98	2,272.19	-40.79	765.00	720.82	44.18	17.315		
11,800.00	9,532.00	12,559.27	10,297.00	48.58	50.00	179.99	2,372.19	-39.95	765.00	719.52	45.48	16.822		
11,900.00	9,532.00	12,659.27	10,297.00	49.65	51.02	179.99	2,472.18	-39.11	765.00	718.21	46.79	16.351		
12,000.00	9,532.00	12,759.27	10,297.00	50.73	52.05	179.99	2,572.18	-38.27	765.00	716.89	48.11	15.900		
12,100.00	9,532.00	12,859.27	10,297.00	51.83	53.11	179.99	2,672.18	-37.43	765.00	715.55	49.45	15.469		
12,200.00	9,532.00	12,959.27	10,297.00	52.95	54.19	179.99	2,772.17	-36.60	765.00	714.19	50.81	15.057		
12,300.00	9,532.00	13,059.27	10,297.00	54.08	55.28	179.99	2,872.17	-35.76	765.00	712.83	52.17	14.663		
12,400.00	9,532.00	13,159.27	10,297.00	55.23	56.39	179.99	2,972.17	-34.92	765.00	711.45	53.55	14.286		
12,500.00	9,532.00	13,259.27	10,297.00	56.39	57.52	179.99	3,072.16	-34.08	765.00	710.07	54.93	13.926		
12,600.00	9,532.00	13,359.27	10,297.00	57.56	58.66	179.99	3,172.16	-33.24	765.00	708.67	56.33	13.581		
12,700.00	9,532.00	13,459.27	10,297.00	58.75	59.81	179.99	3,272.16	-32.41	765.00	707.26	57.74	13.250		
12,800.00	9,532.00	13,559.27	10,297.00	59.95	60.97	179.99	3,372.15	-31.57	765.00	705.85	59.15	12.933		
12,900.00	9,532.00	13,659.27	10,297.00	61.16	62.15	179.99	3,472.15	-30.73	765.00	704.43	60.57	12.630		
13,000.00	9,532.00	13,759.27	10,297.00	62.38	63.34	179.99	3,572.15	-29.89	765.00	703.00	62.00	12.339		
13,100.00	9,532.00	13,859.27	10,297.00	63.61	64.54	179.99	3,672.14	-29.05	765.00	701.57	63.43	12.060		
13,200.00	9,532.00	13,959.27	10,297.00	64.85	65.75	179.99	3,772.14	-28.22	765.00	700.13	64.87	11.792		
13,300.00	9,532.00	14,059.27	10,297.00	66.10	66.97	179.99	3,872.14	-27.38	765.00	698.68	66.32	11.535		
13,400.00	9,532.00	14,159.27	10,297.00	67.36	68.20	179.99	3,972.13	-26.54	765.00	697.23	67.77	11.288		
13,500.00	9,532.00	14,259.27	10,297.00	68.62	69.44	180.00	4,072.13	-25.70	765.00	695.77	69.23	11.050		

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Charlie Sweeney Federal 31-23S-28E - 223H - OH - Preliminary Plan 1													Offset Well Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,600.00	9,532.00	14,359.27	10,297.00	69.90	70.69	180.00	4,172.12	-24.87	765.00	694.31	70.69	10.821		
13,700.00	9,532.00	14,459.27	10,297.00	71.18	71.94	180.00	4,272.12	-24.03	765.00	692.84	72.16	10.601		
13,800.00	9,532.00	14,559.27	10,297.00	72.46	73.20	180.00	4,372.12	-23.19	765.00	691.37	73.63	10.390		
13,900.00	9,532.00	14,659.27	10,297.00	73.75	74.47	180.00	4,472.11	-22.35	765.00	689.89	75.11	10.185		
14,000.00	9,532.00	14,759.27	10,297.00	75.05	75.74	180.00	4,572.11	-21.51	765.00	688.41	76.59	9.989		
14,100.00	9,532.00	14,859.27	10,297.00	76.35	77.02	180.00	4,672.11	-20.68	765.00	686.93	78.07	9.799		
14,200.00	9,532.00	14,959.27	10,297.00	77.66	78.31	180.00	4,772.10	-19.84	765.00	685.45	79.55	9.616		
14,259.30	9,532.00	15,018.58	10,297.00	78.44	79.08	180.00	4,831.40	-19.34	765.00	684.56	80.44	9.511		
14,299.90	9,532.00	15,059.17	10,297.00	78.97	79.60	180.00	4,872.00	-19.00	765.00	683.96	81.04	9.440		
14,300.90	9,532.00	15,059.17	10,297.00	78.99	79.60	180.00	4,872.00	-19.00	765.00	683.96	81.04	9.439		



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 227H - OH - Preliminary Plan 1														Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	1.00	0.00	0.00	90.00	0.00	90.00	90.01						
100.00	100.00	99.00	100.00	0.13	0.13	90.00	0.00	90.00	90.00	89.74	0.26	348.038			
200.00	200.00	199.00	200.00	0.49	0.48	90.00	0.00	90.00	90.00	89.03	0.97	92.474			
300.00	300.00	299.00	300.00	0.85	0.84	90.00	0.00	90.00	90.00	88.31	1.69	53.248			
400.00	400.00	399.00	400.00	1.21	1.20	90.00	0.00	90.00	90.00	87.59	2.41	37.389			
500.00	500.00	499.00	500.00	1.56	1.56	90.00	0.00	90.00	90.00	86.88	3.12	28.808			
600.00	600.00	599.00	600.00	1.92	1.92	90.00	0.00	90.00	90.00	86.16	3.84	23.431			
700.00	700.00	699.00	700.00	2.28	2.28	90.00	0.00	90.00	90.00	85.44	4.56	19.746			
800.00	800.00	799.00	800.00	2.64	2.64	90.00	0.00	90.00	90.00	84.73	5.27	17.062			
900.00	900.00	899.00	900.00	3.00	2.99	90.00	0.00	90.00	90.00	84.01	5.99	15.020			
1,000.00	1,000.00	999.00	1,000.00	3.36	3.35	90.00	0.00	90.00	90.00	83.29	6.71	13.415 CC			
1,100.00	1,099.99	1,098.79	1,097.78	3.70	3.69	-63.87	-0.32	91.18	90.63	83.24	7.39	12.264 ES			
1,200.00	1,199.91	1,194.49	1,195.41	4.03	4.03	-65.35	-1.30	94.78	92.60	84.55	8.05	11.503			
1,266.79	1,266.57	1,259.68	1,260.48	4.25	4.25	-66.82	-2.31	98.52	94.73	86.23	8.50	11.150			
1,300.00	1,299.70	1,292.07	1,292.79	4.36	4.36	-67.61	-2.92	100.77	96.10	87.38	8.72	11.022			
1,400.00	1,399.46	1,391.70	1,392.11	4.70	4.71	-69.78	-4.96	108.31	100.91	91.51	9.40	10.731			
1,500.00	1,499.21	1,491.51	1,491.61	5.05	5.06	-71.76	-7.01	115.87	105.86	95.77	10.10	10.485			
1,600.00	1,598.97	1,591.32	1,591.12	5.40	5.42	-73.56	-9.06	123.43	110.93	100.13	10.80	10.276			
1,700.00	1,698.73	1,691.14	1,690.62	5.75	5.78	-75.20	-11.11	130.98	116.10	104.60	11.50	10.096			
1,800.00	1,798.48	1,790.95	1,790.13	6.10	6.14	-76.70	-13.16	138.54	121.35	109.14	12.21	9.940			
1,900.00	1,898.24	1,890.77	1,889.64	6.46	6.50	-78.07	-15.21	146.10	126.68	113.76	12.92	9.804			
2,000.00	1,998.00	1,990.58	1,989.14	6.82	6.86	-79.33	-17.26	153.66	132.07	118.44	13.64	9.686			
2,100.00	2,097.75	2,090.39	2,088.65	7.18	7.22	-80.49	-19.31	161.22	137.53	123.17	14.35	9.581			
2,200.00	2,197.51	2,190.21	2,188.15	7.54	7.59	-81.57	-21.36	168.78	143.04	127.96	15.08	9.488			
2,300.00	2,297.26	2,290.02	2,287.66	7.90	7.95	-82.56	-23.41	176.33	148.59	132.79	15.80	9.406			
2,400.00	2,397.02	2,389.83	2,387.17	8.26	8.32	-83.48	-25.46	183.89	154.18	137.66	16.52	9.332			
2,500.00	2,496.78	2,489.65	2,486.67	8.63	8.69	-84.34	-27.51	191.45	159.82	142.57	17.25	9.265			
2,600.00	2,596.53	2,589.46	2,586.18	8.99	9.06	-85.14	-29.56	199.01	165.48	147.50	17.98	9.206			
2,700.00	2,696.29	2,689.28	2,685.68	9.36	9.42	-85.88	-31.61	206.57	171.18	152.47	18.70	9.151			
2,800.00	2,796.05	2,787.72	2,783.81	9.72	9.79	-86.53	-33.68	214.20	177.05	157.62	19.43	9.112			
2,900.00	2,895.80	2,883.88	2,879.48	10.09	10.15	-86.74	-36.21	223.56	184.54	164.39	20.15	9.158			
3,000.00	2,995.56	2,979.72	2,974.56	10.46	10.52	-86.48	-39.37	235.20	193.98	173.11	20.87	9.294			
3,100.00	3,095.31	3,075.12	3,088.87	10.82	10.89	-85.83	-43.13	249.06	205.39	183.80	21.59	9.512			
3,200.00	3,195.07	3,172.41	3,164.72	11.19	11.28	-84.91	-47.49	265.15	218.49	196.17	22.32	9.787			
3,236.48	3,231.46	3,208.55	3,200.30	11.32	11.42	-84.58	-49.13	271.20	223.35	200.76	22.59	9.886			
3,300.00	3,294.86	3,271.44	3,262.24	11.56	11.68	-84.04	-51.99	281.74	231.88	208.82	23.06	10.056			
3,400.00	3,394.78	3,370.30	3,359.60	11.92	12.08	-82.79	-56.48	298.31	245.63	221.85	23.79	10.327			
3,500.00	3,494.76	3,468.93	3,456.73	12.26	12.48	-81.13	-60.96	314.83	259.92	235.43	24.49	10.613			
3,503.27	3,498.03	3,472.15	3,459.90	12.27	12.49	72.28	-61.10	315.37	260.40	235.95	24.45	10.650			
3,600.00	3,594.76	3,567.41	3,553.72	12.60	12.88	74.17	-65.43	331.33	274.71	249.60	25.12	10.938			
3,700.00	3,694.76	3,665.89	3,650.70	12.93	13.28	75.94	-69.91	347.84	289.79	263.99	25.80	11.231			
3,800.00	3,794.76	3,764.37	3,747.69	13.27	13.69	77.52	-74.38	364.34	305.11	278.62	26.49	11.516			
3,900.00	3,894.76	3,862.86	3,844.68	13.61	14.10	78.96	-78.85	380.84	320.64	293.45	27.19	11.794			
4,000.00	3,994.76	3,961.34	3,941.66	13.95	14.50	80.26	-83.33	397.34	336.34	308.46	27.88	12.064			
4,100.00	4,094.76	4,059.82	4,038.65	14.29	14.91	81.45	-87.80	413.84	352.21	323.63	28.57	12.326			
4,200.00	4,194.76	4,158.30	4,135.63	14.63	15.33	82.53	-92.27	430.34	368.20	338.93	29.27	12.579			
4,300.00	4,294.76	4,256.78	4,232.62	14.97	15.74	83.53	-96.75	446.84	384.32	354.35	29.97	12.824			
4,400.00	4,394.76	4,355.26	4,329.61	15.31	16.15	84.44	-101.22	463.34	400.54	369.87	30.67	13.061			
4,500.00	4,494.76	4,453.75	4,426.59	15.66	16.56	85.28	-105.70	479.84	416.85	385.48	31.37	13.289			
4,600.00	4,594.76	4,552.23	4,523.58	16.00	16.98	86.06	-110.17	496.35	433.24	401.17	32.07	13.509			
4,700.00	4,694.76	4,650.71	4,620.57	16.35	17.39	86.79	-114.64	512.85	449.71	416.93	32.77	13.722			
4,800.00	4,794.76	4,749.19	4,717.55	16.69	17.81	87.46	-119.12	529.35	466.24	432.76	33.48	13.927			

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



Phoenix Technology Services

Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 227H - OH - Preliminary Plan 1														Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
4,900.00	4,894.76	4,850.00	4,816.83	17.04	18.23	88.10	-123.68	546.19	482.79	448.60	34.19	14.121			
5,000.00	4,994.76	4,962.66	4,928.15	17.38	18.70	88.69	-128.23	562.95	497.56	462.61	34.95	14.238			
5,100.00	5,094.76	5,076.27	5,040.87	17.73	19.15	89.14	-131.93	576.63	509.54	473.84	35.70	14.271			
5,200.00	5,194.76	5,190.63	5,154.71	18.08	19.59	89.48	-134.78	587.13	518.70	482.23	36.46	14.225			
5,300.00	5,294.76	5,305.55	5,269.38	18.43	20.01	89.70	-136.74	594.36	524.98	487.76	37.22	14.104			
5,400.00	5,394.76	5,420.81	5,384.56	18.77	20.41	89.81	-137.80	598.26	528.36	490.39	37.98	13.913			
5,500.00	5,494.76	5,531.02	5,494.76	19.12	20.77	89.84	-138.00	599.00	529.00	490.30	38.70	13.669			
5,600.00	5,594.76	5,631.02	5,594.76	19.47	21.09	89.84	-138.00	599.00	529.00	489.62	39.39	13.432			
5,700.00	5,694.76	5,731.02	5,694.76	19.82	21.41	89.84	-138.00	599.00	529.00	488.93	40.07	13.202			
5,800.00	5,794.76	5,831.02	5,794.76	20.17	21.74	89.84	-138.00	599.00	529.00	488.25	40.76	12.979			
5,900.00	5,894.76	5,931.02	5,894.76	20.52	22.06	89.84	-138.00	599.00	529.00	487.56	41.44	12.764			
6,000.00	5,994.76	6,031.02	5,994.76	20.87	22.39	89.84	-138.00	599.00	529.00	486.87	42.13	12.555			
6,100.00	6,094.76	6,131.02	6,094.76	21.22	22.72	89.84	-138.00	599.00	529.00	486.18	42.82	12.353			
6,200.00	6,194.76	6,231.02	6,194.76	21.57	23.04	89.84	-138.00	599.00	529.00	485.49	43.51	12.157			
6,300.00	6,294.76	6,331.02	6,294.76	21.92	23.37	89.84	-138.00	599.00	529.00	484.80	44.20	11.967			
6,400.00	6,394.76	6,431.02	6,394.76	22.27	23.70	89.84	-138.00	599.00	529.00	484.11	44.90	11.783			
6,500.00	6,494.76	6,531.02	6,494.76	22.63	24.03	89.84	-138.00	599.00	529.00	483.41	45.59	11.604			
6,600.00	6,594.76	6,631.02	6,594.76	22.98	24.36	89.84	-138.00	599.00	529.00	482.72	46.28	11.430			
6,700.00	6,694.76	6,731.02	6,694.76	23.33	24.69	89.84	-138.00	599.00	529.00	482.03	46.98	11.261			
6,800.00	6,794.76	6,831.02	6,794.76	23.68	25.03	89.84	-138.00	599.00	529.00	481.33	47.67	11.097			
6,900.00	6,894.76	6,931.02	6,894.76	24.03	25.36	89.84	-138.00	599.00	529.00	480.64	48.37	10.937			
7,000.00	6,994.76	7,031.02	6,994.76	24.39	25.70	89.84	-138.00	599.00	529.00	479.94	49.06	10.782			
7,100.00	7,094.76	7,131.02	7,094.76	24.74	26.03	89.84	-138.00	599.00	529.00	479.24	49.76	10.631			
7,200.00	7,194.76	7,231.02	7,194.76	25.09	26.37	89.84	-138.00	599.00	529.00	478.55	50.46	10.484			
7,300.00	7,294.76	7,331.02	7,294.76	25.44	26.70	89.84	-138.00	599.00	529.00	477.85	51.15	10.341			
7,400.00	7,394.76	7,431.02	7,394.76	25.80	27.04	89.84	-138.00	599.00	529.00	477.15	51.85	10.202			
7,500.00	7,494.76	7,531.02	7,494.76	26.15	27.37	89.84	-138.00	599.00	529.00	476.45	52.55	10.066			
7,600.00	7,594.76	7,631.02	7,594.76	26.50	27.71	89.84	-138.00	599.00	529.00	475.75	53.25	9.934			
7,700.00	7,694.76	7,731.02	7,694.76	26.86	28.05	89.84	-138.00	599.00	529.00	475.05	53.95	9.805			
7,800.00	7,794.76	7,831.02	7,794.76	27.21	28.39	89.84	-138.00	599.00	529.00	474.35	54.65	9.680			
7,900.00	7,894.76	7,931.02	7,894.76	27.57	28.73	89.84	-138.00	599.00	529.00	473.65	55.35	9.557			
8,000.00	7,994.76	8,031.02	7,994.76	27.92	29.07	89.84	-138.00	599.00	529.00	472.95	56.05	9.438			
8,100.00	8,094.76	8,131.02	8,094.76	28.27	29.41	89.84	-138.00	599.00	529.00	472.25	56.75	9.321			
8,200.00	8,194.76	8,231.02	8,194.76	28.63	29.75	89.84	-138.00	599.00	529.00	471.55	57.46	9.207			
8,300.00	8,294.76	8,331.02	8,294.76	28.98	30.09	89.84	-138.00	599.00	529.00	470.84	58.16	9.096			
8,400.00	8,394.76	8,431.02	8,394.76	29.34	30.43	89.84	-138.00	599.00	529.00	470.14	58.86	8.987			
8,500.00	8,494.76	8,531.02	8,494.76	29.69	30.77	89.84	-138.00	599.00	529.00	469.44	59.56	8.881			
8,600.00	8,594.76	8,631.02	8,594.76	30.05	31.11	89.84	-138.00	599.00	529.00	468.74	60.27	8.778			
8,700.00	8,694.76	8,731.02	8,694.76	30.40	31.46	89.84	-138.00	599.00	529.00	468.03	60.97	8.676			
8,800.00	8,794.76	8,831.02	8,794.76	30.75	31.80	89.84	-138.00	599.00	529.00	467.33	61.67	8.577			
8,900.00	8,894.76	8,931.02	8,894.76	31.11	32.14	89.84	-138.00	599.00	529.00	466.62	62.38	8.481			
8,951.27	8,946.03	8,982.28	8,946.03	31.29	32.32	89.84	-138.00	599.00	529.00	466.26	62.74	8.432			
9,000.00	8,994.71	9,030.96	8,994.71	31.46	32.49	98.71	-138.00	599.00	529.31	466.20	63.12	8.386			
9,050.00	9,044.28	9,080.53	9,044.28	31.63	32.66	99.29	-138.00	599.00	530.33	466.91	63.41	8.363			
9,100.00	9,093.10	9,129.35	9,093.10	31.80	32.82	100.21	-138.00	599.00	532.18	468.51	63.67	8.358 SF			
9,150.00	9,140.80	9,177.06	9,140.80	31.96	32.99	101.43	-138.00	599.00	535.12	471.24	63.88	8.377			
9,200.00	9,187.02	9,223.28	9,187.02	32.12	33.15	102.85	-138.00	599.00	539.44	475.42	64.02	8.426			
9,250.00	9,231.41	9,267.67	9,231.41	32.27	33.30	104.36	-138.00	599.00	545.50	481.42	64.07	8.514			
9,300.00	9,273.63	9,309.88	9,273.63	32.41	33.45	105.87	-138.00	599.00	553.67	489.64	64.03	8.647			
9,350.00	9,313.35	9,349.60	9,313.35	32.55	33.58	107.24	-138.00	599.00	564.33	500.42	63.91	8.830			
9,400.00	9,350.28	9,386.53	9,350.28	32.69	33.71	108.38	-138.00	599.00	577.81	514.08	63.72	9.067			
9,450.00	9,384.13	9,420.38	9,384.13	32.82	33.83	109.16	-138.00	599.00	594.35	530.82	63.53	9.355			

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



Phoenix Technology Services
Anticollision Report



Company: Matador Resources
 Project: Eddy County, NM (NAD27 NME)
 Reference Site: Charlie Sweeney Federal 31-23S-28E
 Site Error: 0.00 usft
 Reference Well: 203H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
 TVD Reference: RKB @ 3135.50usft (Patterson 297)
 MD Reference: RKB @ 3135.50usft (Patterson 297)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: Compass 5000 GCR
 Offset TVD Reference: Reference Datum

Offset Design Charlie Sweeney Federal 31-23S-28E - 227H - OH - Preliminary Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MVD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
9,500.00	9,414.64	9,450.90	9,414.64	32.96	33.93	109.48	-138.00	599.00	614.13	550.72	63.40	9.686		
9,550.00	9,441.59	9,477.85	9,441.59	33.10	34.03	109.24	-138.00	599.00	637.18	573.76	63.42	10.047		
9,600.00	9,464.77	9,501.02	9,464.77	33.24	34.11	108.32	-138.00	599.00	663.46	599.79	63.67	10.420		
9,650.00	9,484.00	9,520.25	9,484.00	33.39	34.17	106.63	-138.00	599.00	692.79	628.59	64.20	10.792		
9,700.00	9,499.14	9,535.39	9,499.14	33.54	34.22	104.05	-138.00	599.00	724.91	659.91	65.00	11.152		
9,701.27	9,499.46	9,535.72	9,499.46	33.55	34.22	103.97	-138.00	599.00	725.76	660.73	65.03	11.161		
9,750.00	9,510.87	9,547.13	9,510.87	33.70	34.29	102.41	-138.00	599.00	759.36	693.78	65.58	11.579		
9,800.00	9,520.05	9,556.30	9,520.05	33.87	34.30	100.25	-138.00	599.00	795.70	729.45	66.25	12.011		
9,850.00	9,526.64	9,562.89	9,526.64	34.04	34.32	97.48	-138.00	599.00	833.68	766.72	66.96	12.451		
9,900.00	9,530.63	9,566.88	9,530.63	34.23	34.33	94.10	-138.00	599.00	873.04	805.43	67.61	12.912		
9,951.27	9,532.00	9,568.26	9,532.00	34.43	34.34	90.00	-138.00	599.00	914.58	846.48	68.10	13.431		
10,000.00	9,532.00	9,568.26	9,532.00	34.63	34.34	90.00	-138.00	599.00	954.61	886.33	68.28	13.981		
10,100.00	9,532.00	10,884.38	10,301.00	35.07	37.68	139.72	666.89	605.75	1,009.40	959.57	49.84	20.255		
10,200.00	9,532.00	10,984.21	10,301.00	35.56	38.09	139.40	766.72	606.58	1,013.02	962.22	50.80	19.940		
10,256.75	9,532.00	11,040.96	10,301.00	35.85	38.35	139.35	823.46	607.06	1,013.57	962.28	51.29	19.763		
10,300.00	9,532.00	11,084.21	10,301.00	36.07	38.56	139.35	866.71	607.42	1,013.57	961.94	51.63	19.631		
10,400.00	9,532.00	11,184.21	10,301.00	36.64	39.07	139.35	966.70	608.26	1,013.56	961.08	52.49	19.311		
10,500.00	9,532.00	11,284.21	10,301.00	37.25	39.62	139.35	1,066.70	609.10	1,013.56	960.14	53.42	18.973		
10,600.00	9,532.00	11,384.21	10,301.00	37.91	40.22	139.35	1,166.69	609.94	1,013.56	959.12	54.43	18.620		
10,700.00	9,532.00	11,484.21	10,301.00	38.61	40.86	139.35	1,266.69	610.78	1,013.55	958.03	55.52	18.257		
10,800.00	9,532.00	11,584.21	10,301.00	39.35	41.54	139.35	1,366.69	611.62	1,013.55	956.88	56.67	17.886		
10,900.00	9,532.00	11,684.21	10,301.00	40.13	42.26	139.35	1,466.68	612.45	1,013.54	955.66	57.88	17.511		
11,000.00	9,532.00	11,784.21	10,301.00	40.95	43.02	139.35	1,566.68	613.29	1,013.54	954.38	59.15	17.134		
11,100.00	9,532.00	11,884.21	10,301.00	41.81	43.81	139.35	1,666.68	614.13	1,013.53	953.05	60.48	16.757		
11,200.00	9,532.00	11,984.21	10,301.00	42.69	44.64	139.35	1,766.67	614.97	1,013.53	951.66	61.87	16.383		
11,300.00	9,532.00	12,084.21	10,301.00	43.61	45.49	139.35	1,866.67	615.81	1,013.52	950.23	63.29	16.013		
11,400.00	9,532.00	12,184.21	10,301.00	44.55	46.37	139.35	1,966.67	616.65	1,013.52	948.75	64.77	15.648		
11,500.00	9,532.00	12,284.21	10,301.00	45.52	47.29	139.35	2,066.66	617.49	1,013.51	947.23	66.29	15.289		
11,600.00	9,532.00	12,384.21	10,301.00	46.52	48.23	139.35	2,166.66	618.33	1,013.51	945.66	67.85	14.938		
11,700.00	9,532.00	12,484.21	10,301.00	47.54	49.19	139.35	2,266.66	619.16	1,013.51	944.06	69.44	14.595		
11,800.00	9,532.00	12,584.21	10,301.00	48.58	50.18	139.35	2,366.65	620.00	1,013.50	942.43	71.07	14.261		
11,900.00	9,532.00	12,684.21	10,301.00	49.65	51.19	139.35	2,466.65	620.84	1,013.50	940.77	72.73	13.935		
12,000.00	9,532.00	12,784.21	10,301.00	50.73	52.22	139.36	2,566.65	621.68	1,013.49	939.07	74.42	13.618		
12,100.00	9,532.00	12,884.21	10,301.00	51.83	53.27	139.36	2,666.64	622.52	1,013.49	937.35	76.14	13.311		
12,200.00	9,532.00	12,984.21	10,301.00	52.95	54.33	139.36	2,766.64	623.36	1,013.48	935.60	77.89	13.012		
12,300.00	9,532.00	13,084.21	10,301.00	54.08	55.42	139.36	2,866.63	624.20	1,013.48	933.82	79.66	12.723		
12,400.00	9,532.00	13,184.21	10,301.00	55.23	56.52	139.36	2,966.63	625.04	1,013.47	932.02	81.45	12.443		
12,500.00	9,532.00	13,284.21	10,301.00	56.39	57.64	139.36	3,066.63	625.87	1,013.47	930.21	83.26	12.172		
12,600.00	9,532.00	13,384.21	10,301.00	57.56	58.77	139.36	3,166.62	626.71	1,013.46	928.37	85.10	11.910		
12,700.00	9,532.00	13,484.21	10,301.00	58.75	59.92	139.36	3,266.62	627.55	1,013.46	926.51	86.95	11.656		
12,800.00	9,532.00	13,584.21	10,301.00	59.95	61.08	139.36	3,366.62	628.39	1,013.45	924.63	88.82	11.410		
12,900.00	9,532.00	13,684.21	10,301.00	61.16	62.25	139.36	3,466.61	629.23	1,013.45	922.74	90.71	11.173		
13,000.00	9,532.00	13,784.21	10,301.00	62.38	63.43	139.36	3,566.61	630.07	1,013.45	920.84	92.61	10.943		
13,100.00	9,532.00	13,884.21	10,301.00	63.61	64.63	139.36	3,666.61	630.91	1,013.44	918.92	94.53	10.721		
13,200.00	9,532.00	13,984.21	10,301.00	64.85	65.83	139.36	3,766.60	631.75	1,013.44	916.98	96.46	10.507		
13,300.00	9,532.00	14,084.21	10,301.00	66.10	67.04	139.36	3,866.60	632.58	1,013.43	915.03	98.40	10.299		
13,400.00	9,532.00	14,184.21	10,301.00	67.36	68.27	139.36	3,966.60	633.42	1,013.43	913.07	100.36	10.098		
13,500.00	9,532.00	14,284.21	10,301.00	68.62	69.50	139.36	4,066.59	634.26	1,013.42	911.10	102.32	9.904		
13,600.00	9,532.00	14,384.21	10,301.00	69.90	70.74	139.36	4,166.59	635.10	1,013.42	909.12	104.30	9.716		
13,700.00	9,532.00	14,484.21	10,301.00	71.18	71.99	139.36	4,266.59	635.94	1,013.41	907.13	106.29	9.535		
13,800.00	9,532.00	14,584.21	10,301.00	72.46	73.25	139.36	4,366.58	636.78	1,013.41	905.12	108.29	9.359		
13,900.00	9,532.00	14,684.21	10,301.00	73.75	74.51	139.36	4,466.58	637.62	1,013.40	903.11	110.29	9.188		

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



Phoenix Technology Services

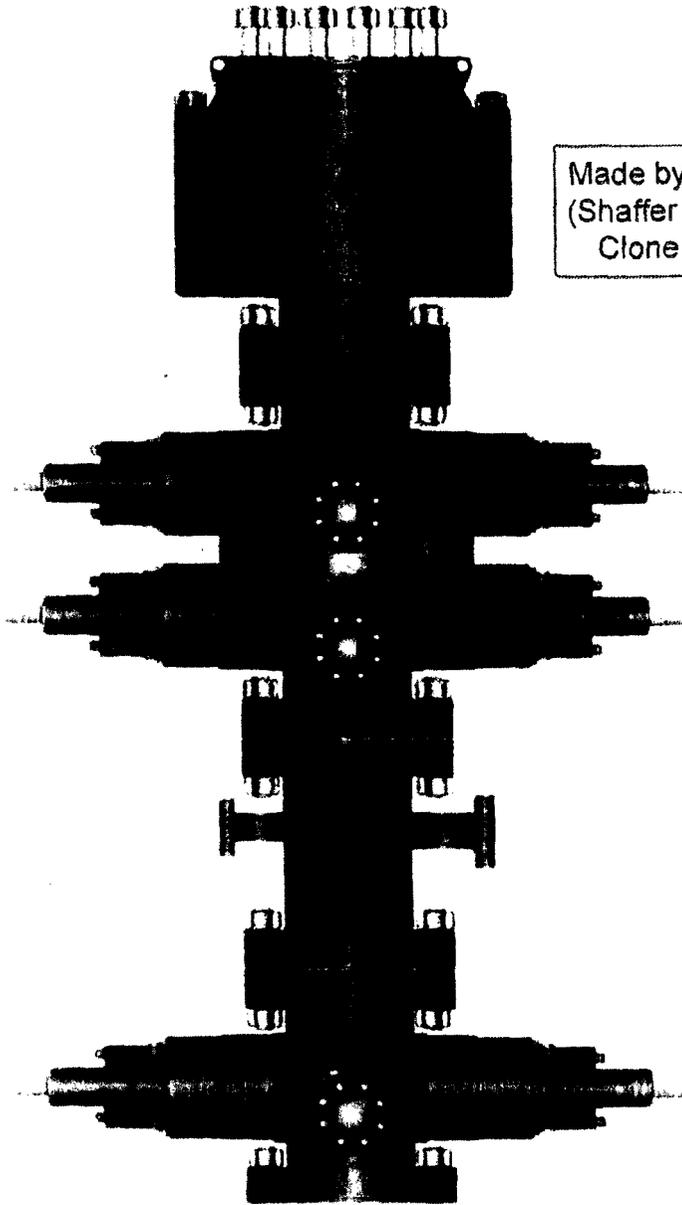
Anticollision Report



Company: Matador Resources
Project: Eddy County, NM (NAD27 NME)
Reference Site: Charlie Sweeney Federal 31-23S-28E
Site Error: 0.00 usft
Reference Well: 203H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Preliminary Plan 1

Local Co-ordinate Reference: Well 203H
TVD Reference: RKB @ 3135.50usft (Patterson 297)
MD Reference: RKB @ 3135.50usft (Patterson 297)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Compass 5000 GCR
Offset TVD Reference: Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-PHX+MWD+HDGM													Offset Well Error:	0.00 usft
Charlie Sweeney Federal 31-23S-28E - 227H - OH - Preliminary Plan 1														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	9,532.00	14,784.21	10,301.00	75.05	75.78	139.36	4,566.58	638.45	1,013.40	901.09	112.31	9.023		
14,100.00	9,532.00	14,884.21	10,301.00	76.35	77.05	139.36	4,666.57	639.29	1,013.40	899.06	114.33	8.864		
14,200.00	9,532.00	14,984.21	10,301.00	77.66	78.34	139.36	4,766.57	640.13	1,013.39	897.03	116.36	8.709		
14,299.90	9,532.00	15,084.11	10,301.00	78.97	79.62	139.36	4,866.47	640.97	1,013.39	894.99	118.40	8.559		
14,300.90	9,532.00	15,085.10	10,301.00	78.99	79.64	139.36	4,867.46	640.98	1,013.39	894.97	118.42	8.558		



Made by Cameron
(Shaffer Spherical)
Clone Annular

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

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

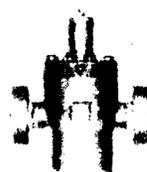
Length 40" Outlets 4" 10M
DSA 4" 10M x 2" 10M

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

WING VALVES



2" Check Valve



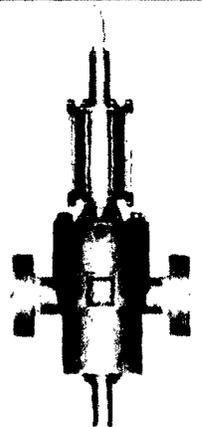
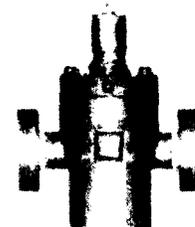
2" Manual Valve



2" Manual Valve

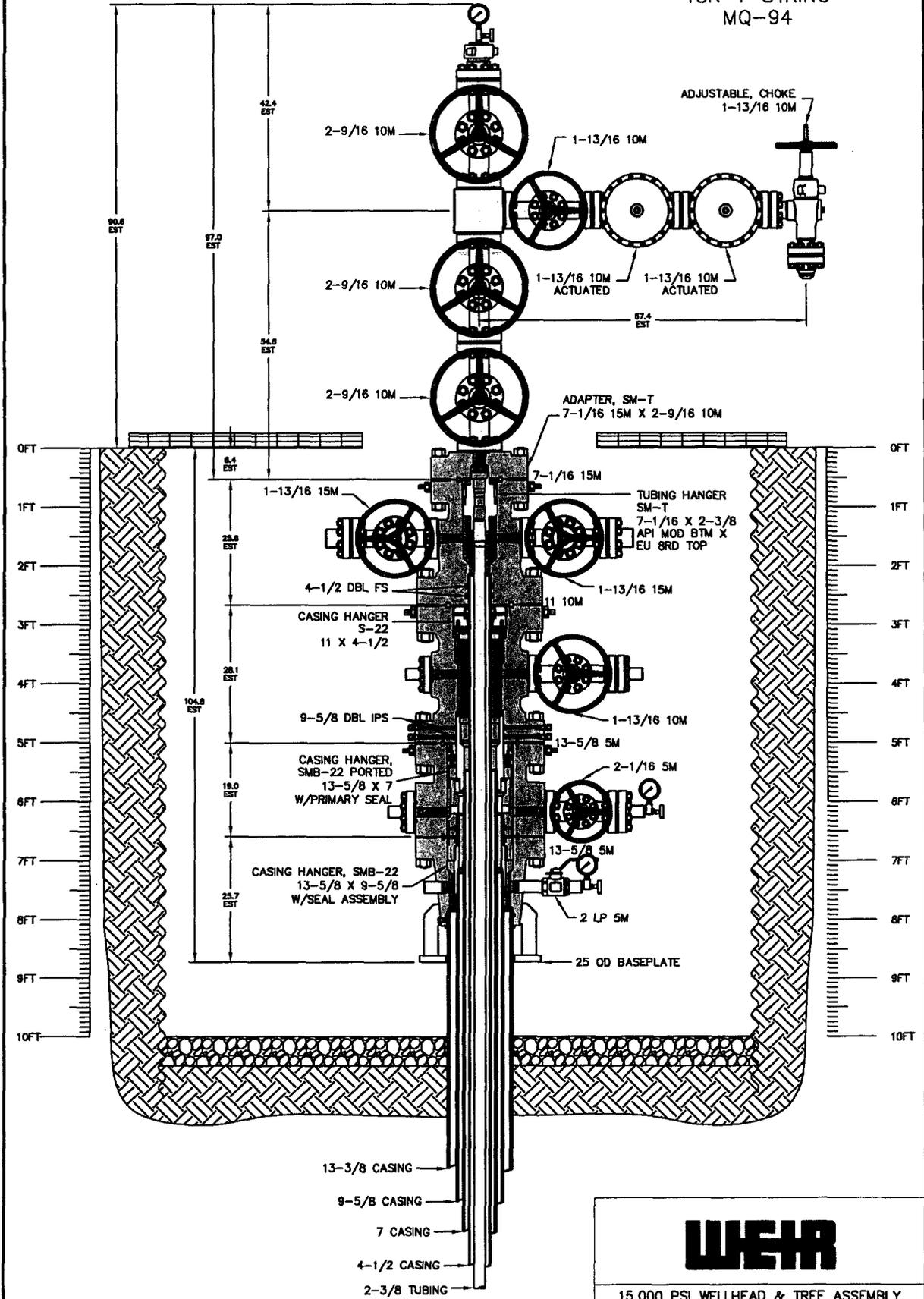


4" Manual Valve



4" Hydraulic Valve

MATADOR
15K 4-STRING
MQ-94



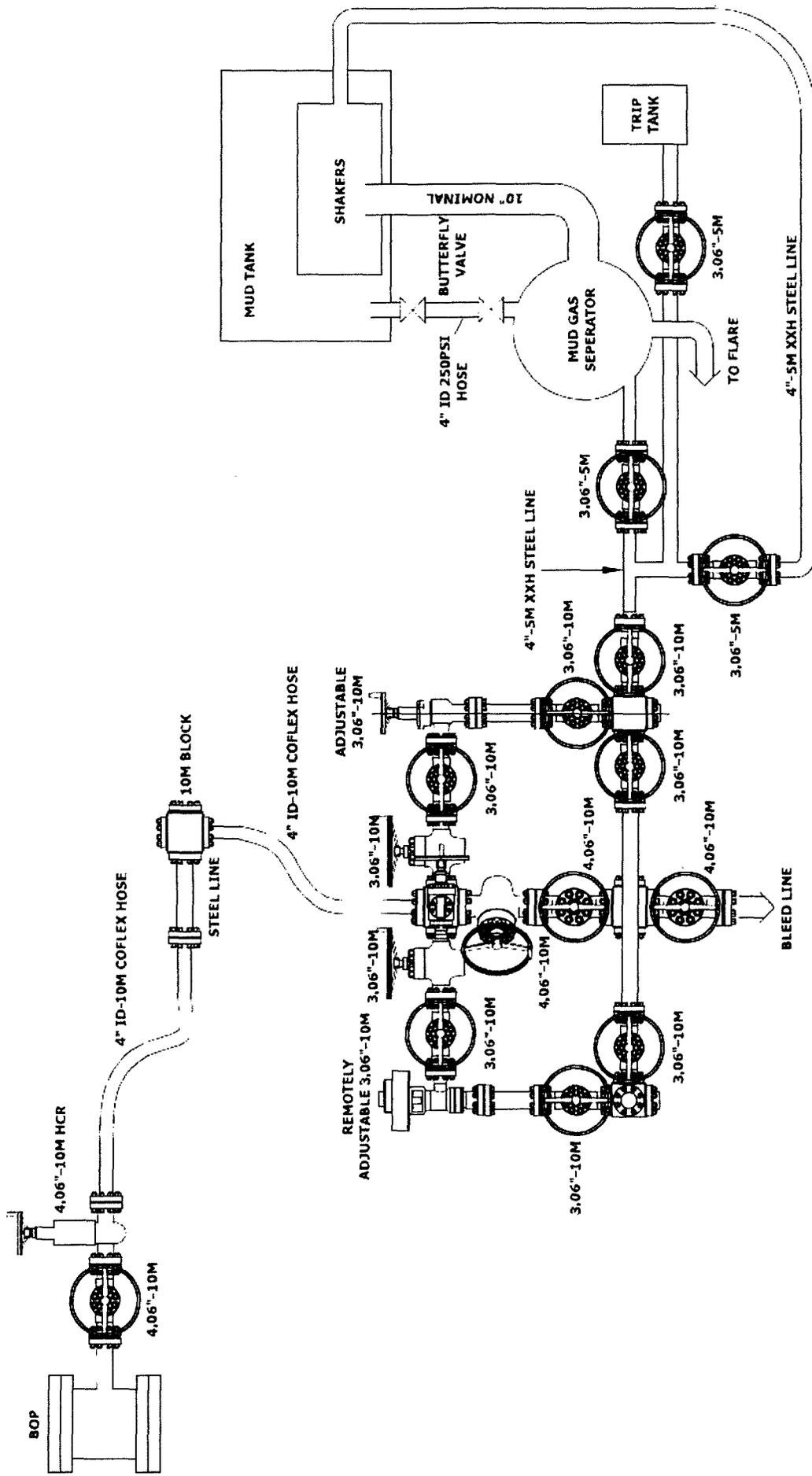
NOTE:
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15,000 PSI WELLHEAD & TREE ASSEMBLY
13-3/8 X 9-5/8 X 7 X 4-1/2 X 2-3/8

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



PATTERSON-UTI
 DRILLING COMPANY LLC

CHOKE MANIFOLD
 TRIP TANK ASSAMBLEMENT
 RIG 201

RO297-D.001.LAY.09

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 DRILLING COMPANY LLC
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NO.	DATE	BY	CHKD	APP'D	REV	DESCRIPTION
1						
2						
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GENERAL NOTES:
 1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
 3. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.
 4. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.
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 10. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.

For the latest performance data, always visit our website: www.tenaris.com

December 31 2015



Size: 4.500 in.

Wall: 0.290 in.

Weight: 13.50 lbs/ft

Grade: P110-ICY

Min. Wall Thickness: 87.5 %

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

Nominal OD	4.500 in.	Nominal Weight	13.50 lbs/ft	Standard Drift Diameter	3.795 in.
Nominal ID	3.920 in.	Wall Thickness	0.290 in.	Special Drift Diameter	N/A
Plain End Weight	13.05 lbs/ft				
Body Yield Strength	479 x 1000 lbs	Internal Yield	14100 psi	SMYS	125000 psi
Collapse	11620 psi				
Connection OD	5.000 in.	Coupling Length	9.075 in.	Connection ID	3.908 in.
Critical Section Area	3.836 sq. in.	Threads per in.	5.00	Make-Up Loss	4.016 in.
Tension Efficiency	100 %	Joint Yield Strength	479 x 1000 lbs	Internal Pressure Capacity ⁽¹⁾	14100 psi
Structural Compression Efficiency	100 %	Structural Compression Strength	479 x 1000 lbs	Structural Bending ⁽²⁾	127 °/100 ft
External Pressure Capacity	11620 psi				
Minimum	6950 ft-lbs	Optimum	7720 ft-lbs	Maximum	8490 ft-lbs
Operating Torque	10500 ft-lbs	Yield Torque	12200 ft-lbs		
<u>Blanking Dimensions</u>					

Internal Hydrostatic Test Graph



Midwest Hose & Specialty, Inc.

Customer: Patterson

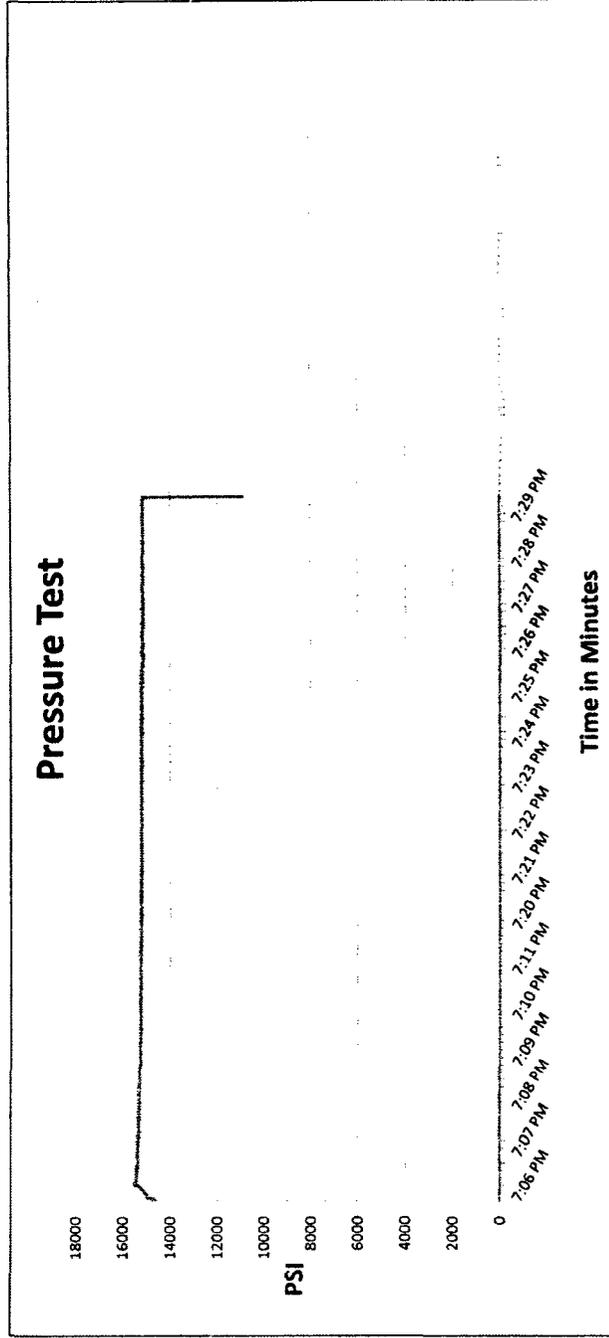
Pick Ticket #: 284918

Hose Specifications

Verification

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

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



Test Pressure 15000 PSI
Time Held at Test Pressure 15 2/4 Minutes
Actual Burst Pressure
Peak Pressure 15732 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 #)	287918-2	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

12/9/2014



Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

Pick Ticket #: 284918

ASPT

Hose Specifications

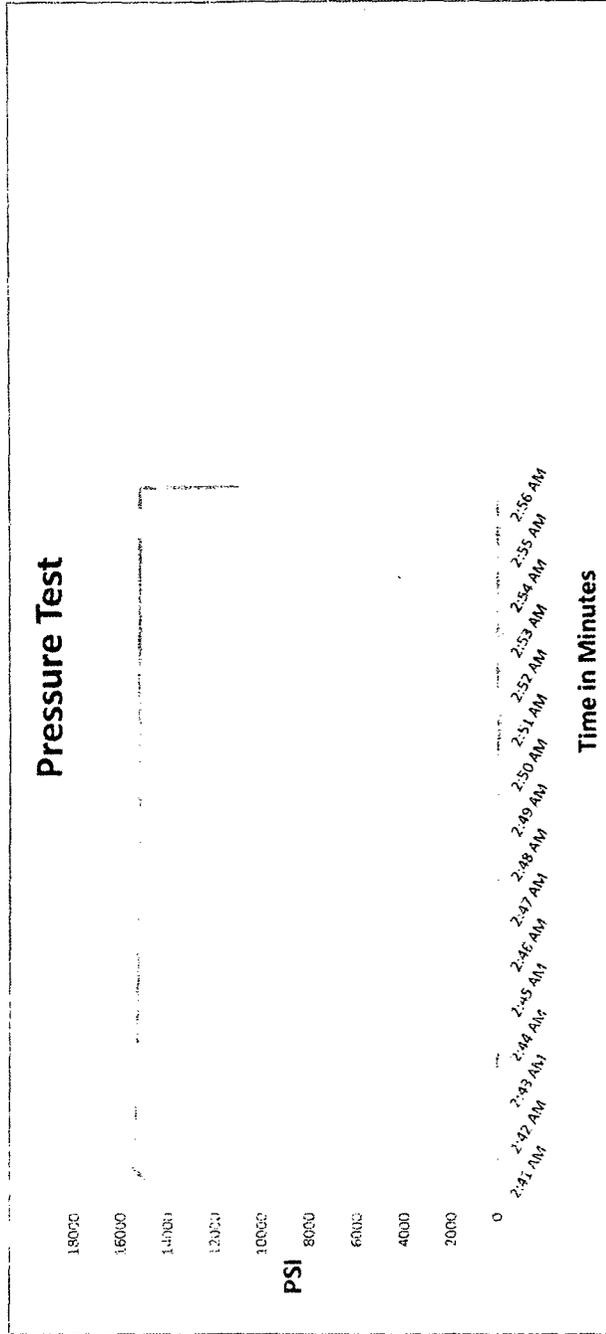
Hose Type: Ck
Length: 20'
I.D.: 3"
O.D.: 4.77"

Verification

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

Working Pressure: 10000 PSI
Burst Pressure: Standard Safety Multiplier Applies

Pressure Test



Test Pressure: 15000 PSI

Time Held at Test Pressure: 15 2/4 Minutes

Actual Burst Pressure

Peak Pressure: 15893 PSI

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

Tested By: Tyler Hill

Approved By: Ryan Adams

T Hill

R 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	
12/9/2014			
		Approved By	



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

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

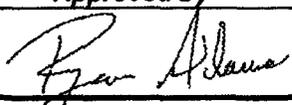
Specifications

<i>Hose Assembly Type:</i> Choke & Kill	
<i>Assembly Serial #</i> 287918-1	<i>Hose Lot # and Date Code</i> 10490-01/13
<i>Hose Working Pressure (psi)</i> 10000	<i>Test Pressure (psi)</i> 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:

<i>Approved By</i>	<i>Date</i>
	12/9/2014

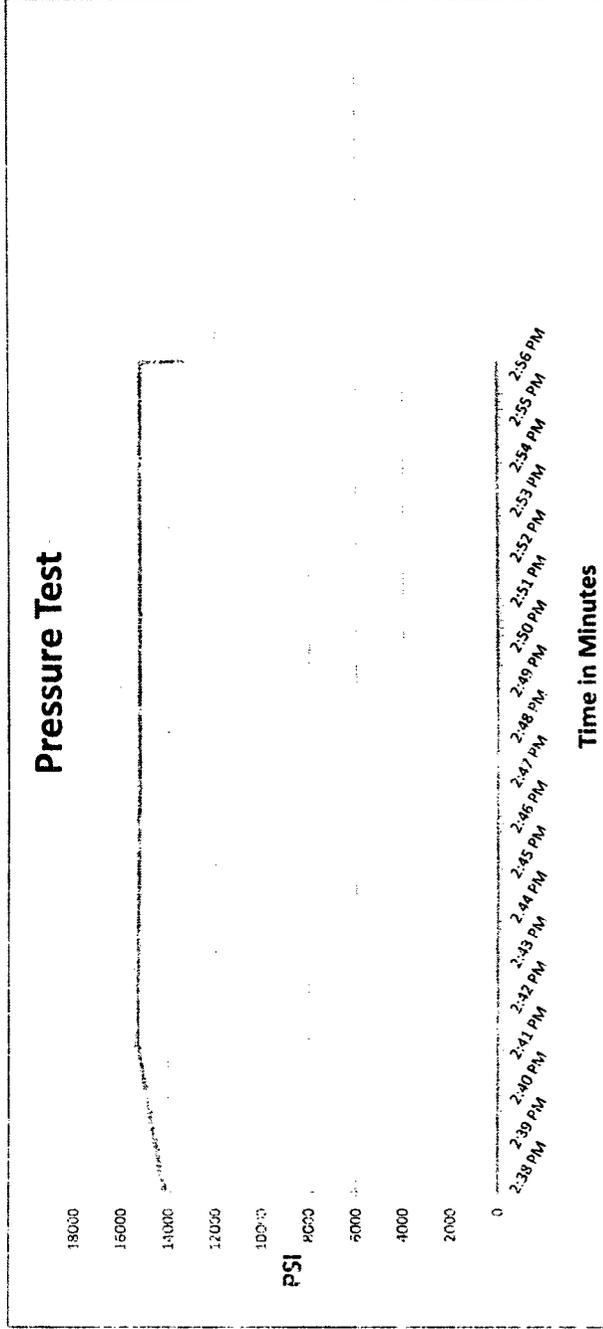
Internal Hydrostatic Test Graph



Midwest Hose & Specialty, Inc.

Customer: Patterson Pick Ticket #: 284918

Hose Specifications		Verification	
Hose Type Mud	Length 70'	Type of Fitting 4 1/16 10K	Coupling Method Swage
I.D. 3"	O.D. 4.79"	Die Size 5.37"	Final O.D. 5.37"
Working Pressure 10000 PSI	Burst Pressure Standard Safety Multiplier Applies	Hose Serial # 10490	Hose Assembly Serial # 284918-3



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

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

Tested By: *[Signature]*
 Approved By: Ryan Adams *[Signature]*



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	12/9/2014	Tested By	Approved By



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

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

Specifications

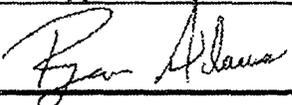
Hose Assembly Type: Choke & Kill	
Assembly Serial # 287918-3	Hose Lot # and Date Code 10490-01/13
Hose Working Pressure (psi) 10000	Test Pressure (psi) 15000

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.

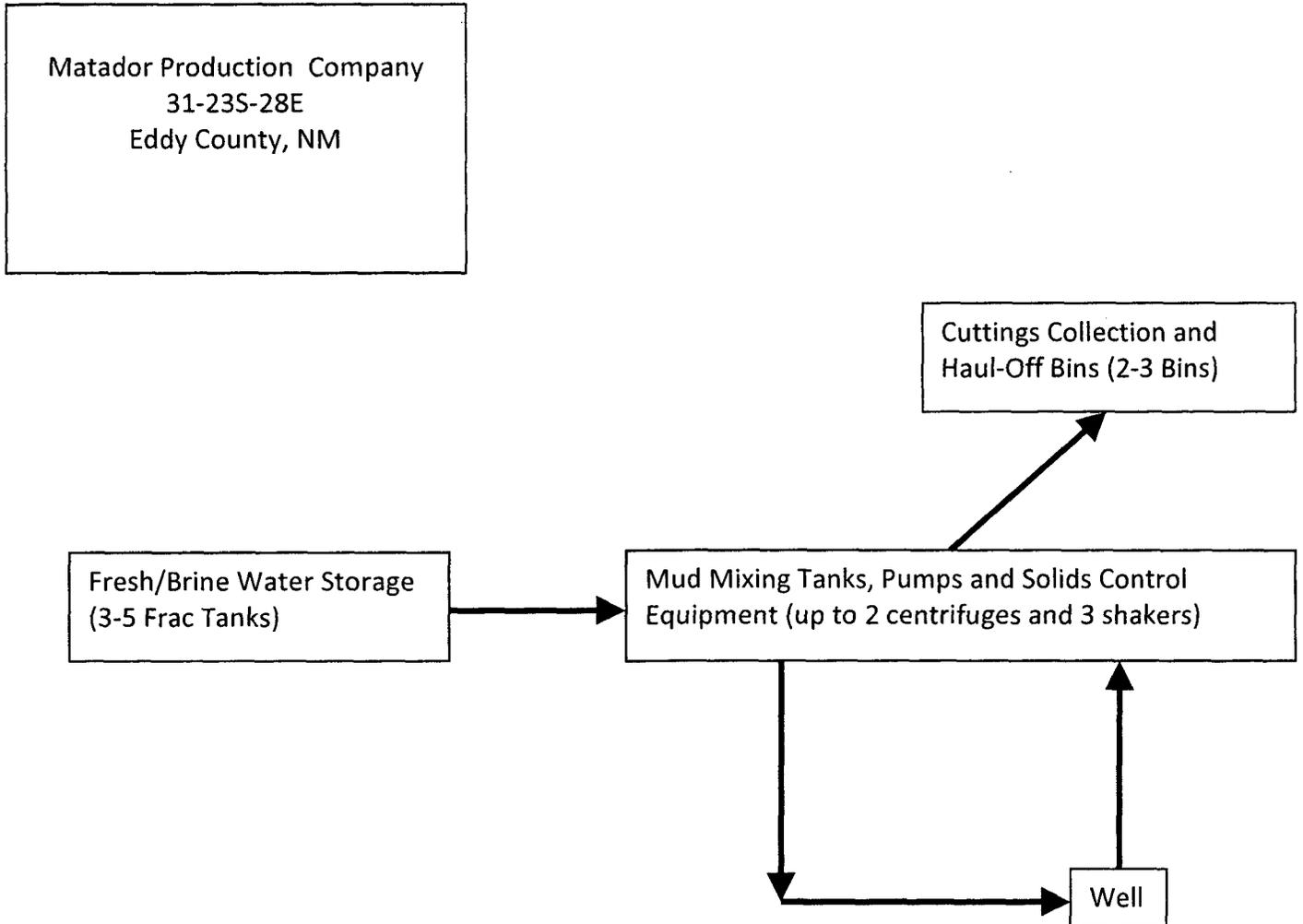
Supplier:

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

Comments:

Approved By	Date
	12/9/2014

Closed-Loop System

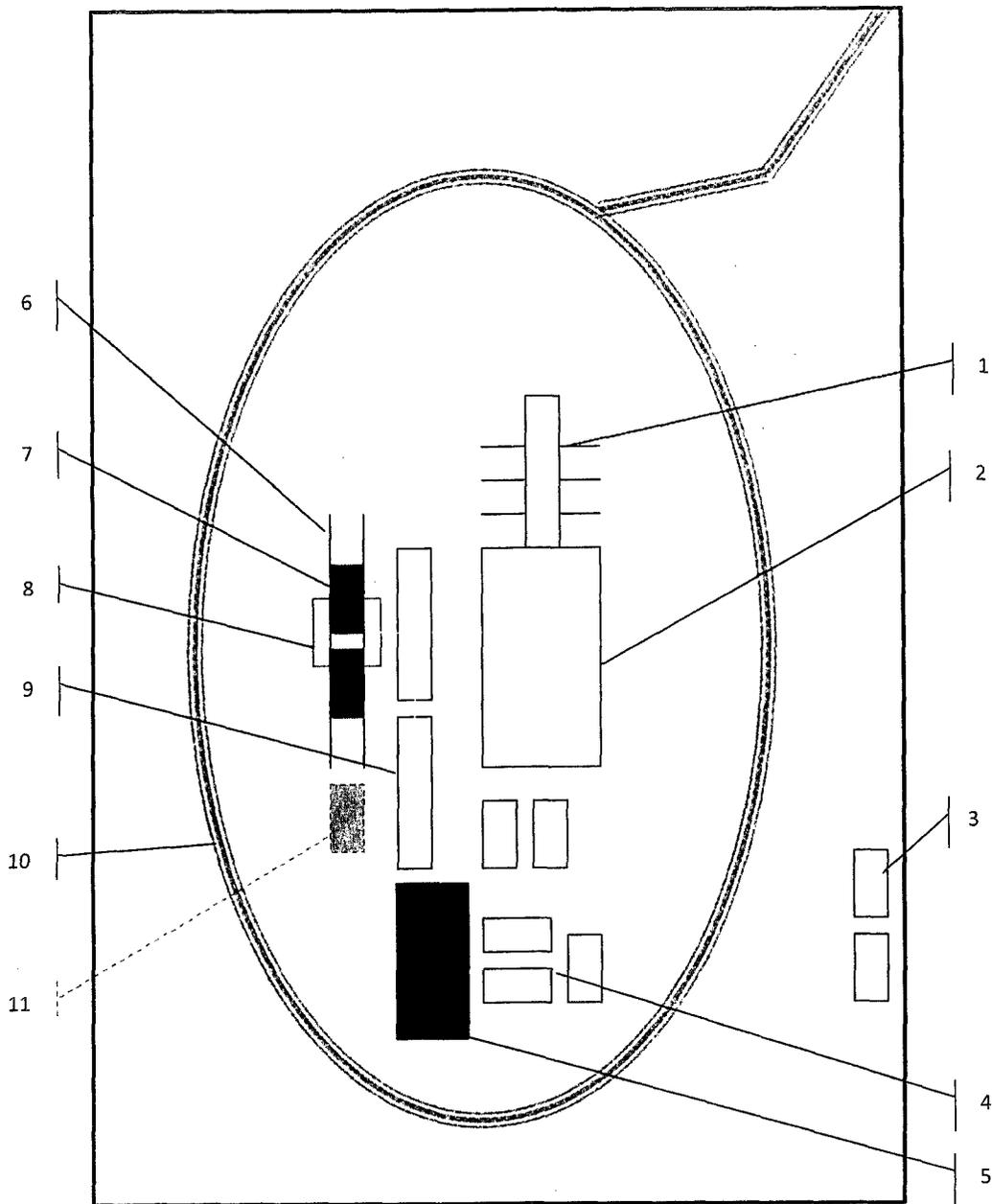


Operating and Maintenance Plan:

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

Closure Plan:

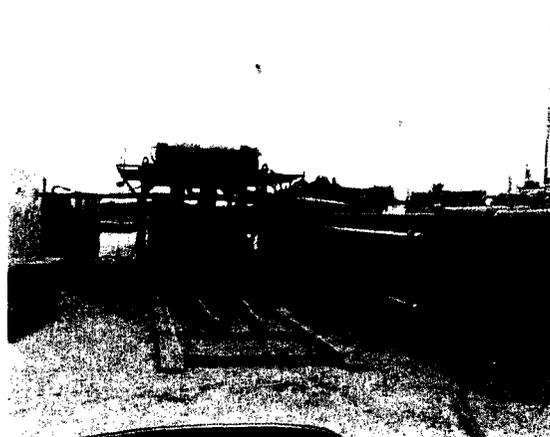
During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.



Schematic Closed Loop Drilling Rig*

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

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

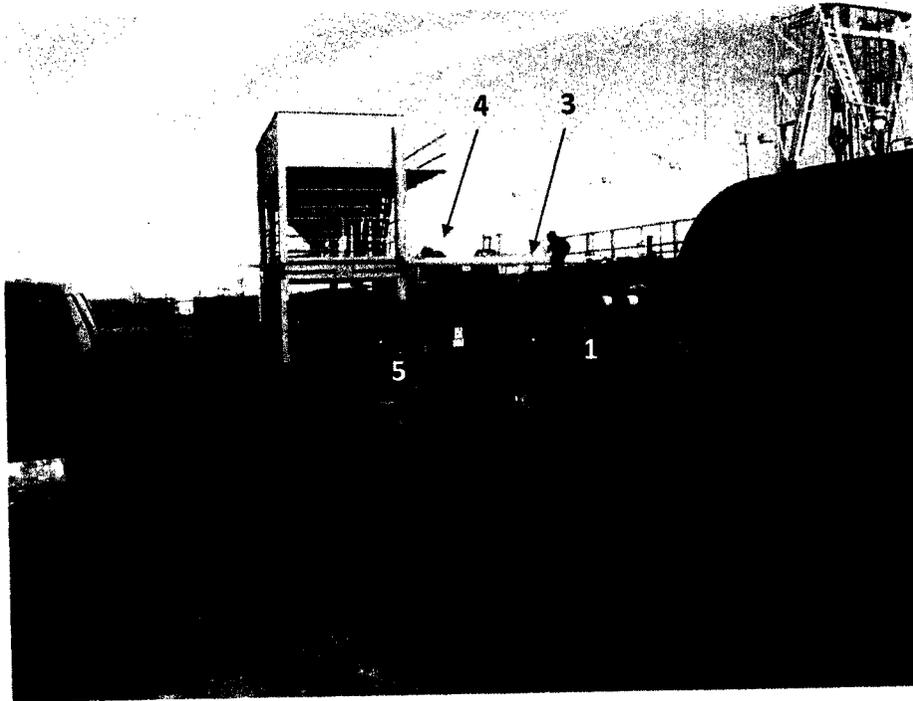


Above: Centrifugal Closed Loop System

PERMITS WEST INC.

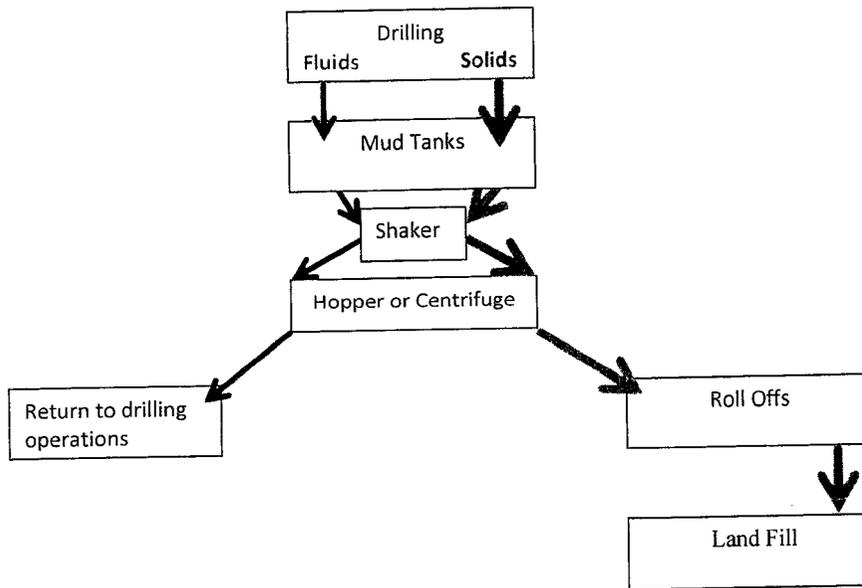
PROVIDING PERMITS for LAND USERS

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



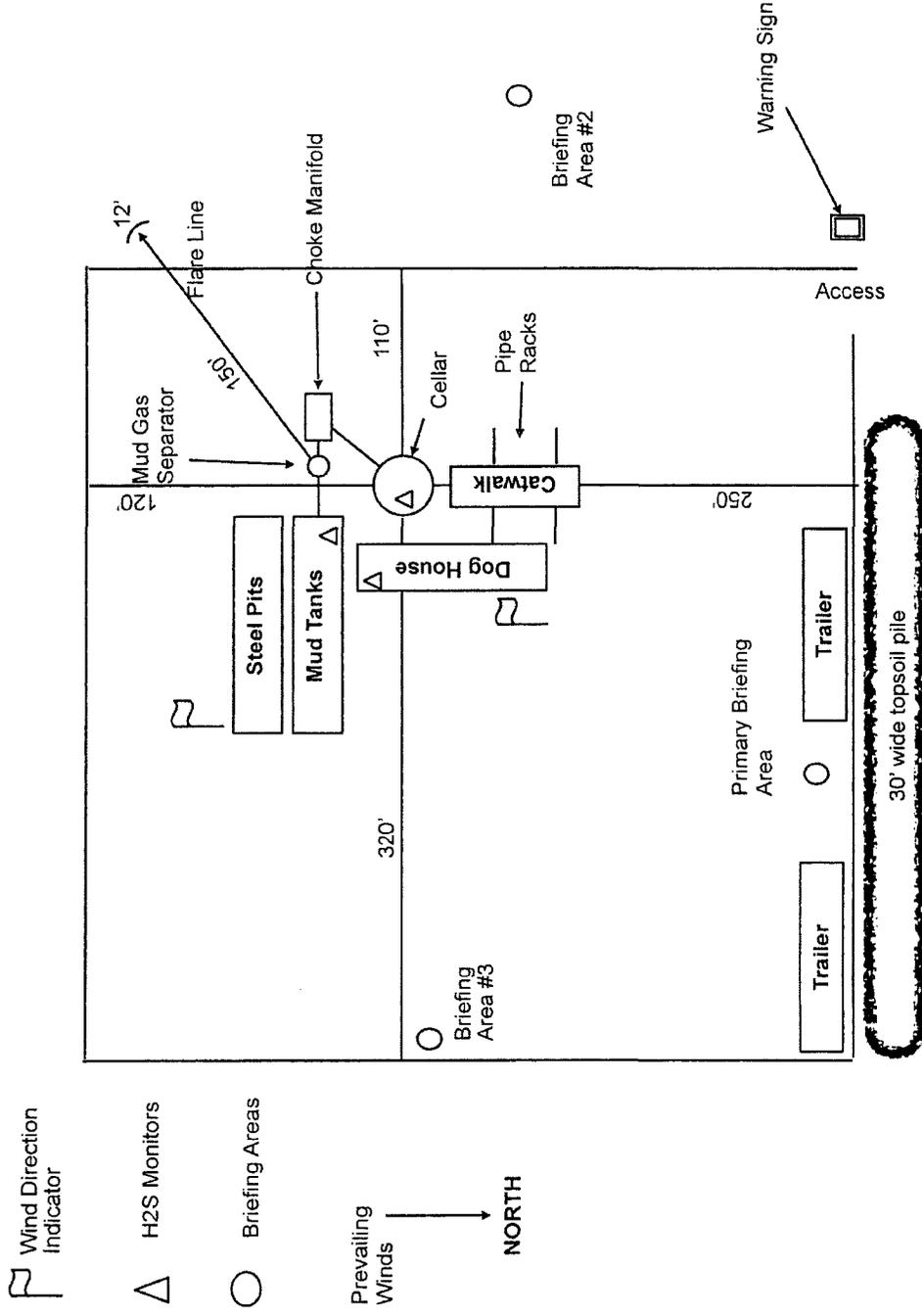
Closed Loop Drilling System: Mud tanks to right (1)
 Hopper in air to settle out solids (2)
 Water return pipe (3)
 Shaker between hopper and mud tanks (4)
 Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids



Rig Layout

Charlie Sweeney Fed Com 203H
 SHL 190' FSL & 2250' FEL
 31-23S-28E
 Eddy County, NM



Wind Direction Indicator

H2S Monitors

Briefing Areas

Prevailing Winds
 NORTH





Hydrogen Sulfide Drilling Operations Plan

Matador Production Company

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes, and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min 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.
- Windsock on the rig floor and / top of doghouse should be high enough to be visible.

4 Condition Flags and Signs:

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

5 Well Control Equipment:

- See APD

6 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 Drilling 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

<u>Company Office</u>			
Matador Production Company	(972)-371-5200		
<u>Key Personnel</u>			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Aaron Byrd	Drilling Engineer	972-371-5267	214-507-2333
	Construction Superintendent		
	Construction Superintendent		
<u>Artesia</u>			
Ambulance			911
State Police		575-746-2703	
City Police		575-746-2703	
Sheriff's Office		575-746-9888	
Fire Department		575-746-2701	
Local Emergency Planning Committee		575-746-2122	
New Mexico Oil Conservation Division		575-748-1283	
<u>Carlsbad</u>			
Ambulance			911
State Police		575-885-3137	
City Police		575-885-2111	
Sheriff's Office		575-887-7551	
Fire Department		575-887-3798	
Local Emergency Planning Committee		575-887-6544	
New Mexico Oil Conservation Division		575-887-6544	
<u>Santa Fe</u>			
New Mexico Emergency Response Commission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Commission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
<u>National</u>			
Carlsbad BLM		575-234-5972	
National Emergency Response Center (Washington, D.C.)		800-424-8802	
<u>Medical</u>			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd S.E., D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop S.E.; Albuquerque, NM		505-842-4949	
<u>Other</u>			
Boots & Coots IWC		800-256-9688	or 281-931-8884
Cudd Pressure Control		432-699-0139	or 432-563-3356
Halliburton		575-746-2757	
B.J. Services		575-746-3569	

H2S Rig Layout

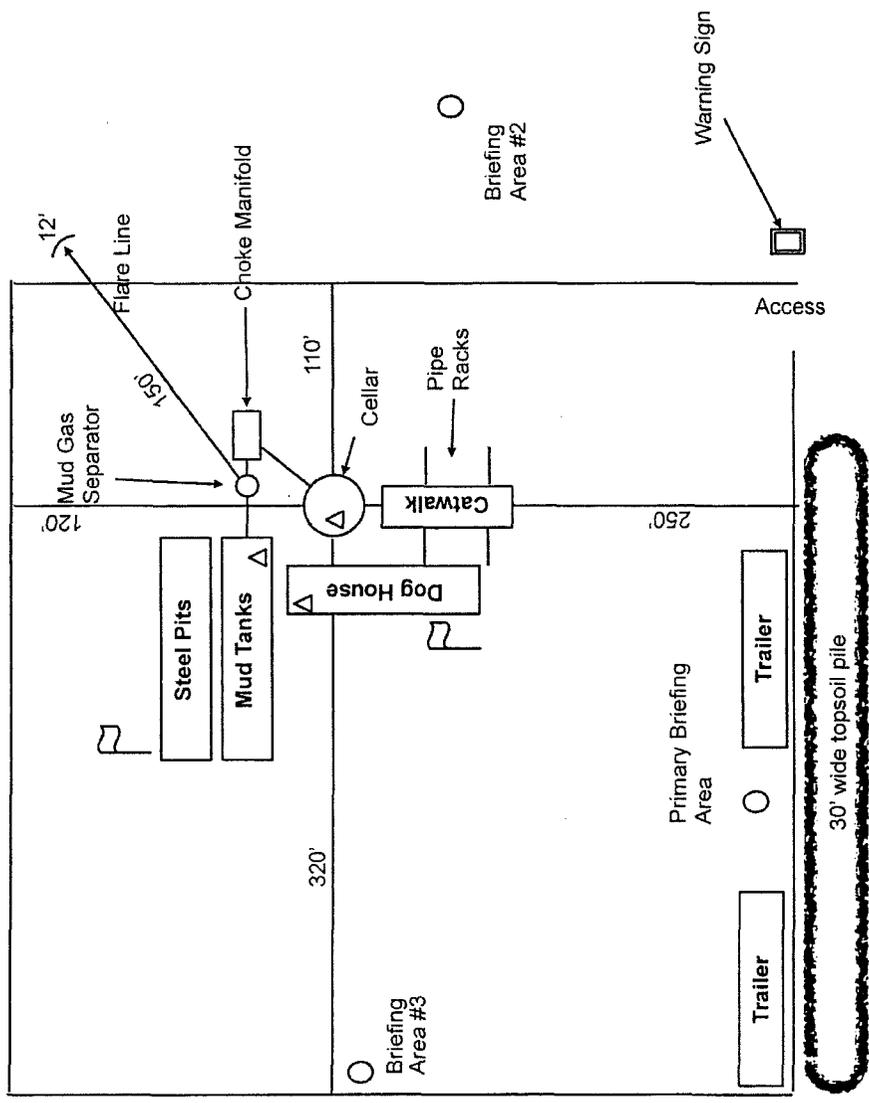
Charlie Sweeney Fed Com 203H
 SHL 190' FSL & 2250' FEL
 31-23S-28E
 Eddy County, NM

Wind Direction Indicator

H2S Monitors

Briefing Areas

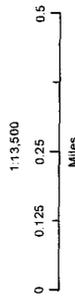
Prevailing Winds
 NORTH



Matador Production Company

CHARLIE SWEENEY FED COM
31-23S-28E #203H
HzS Contingency Plan:
1 Mile Radius Map

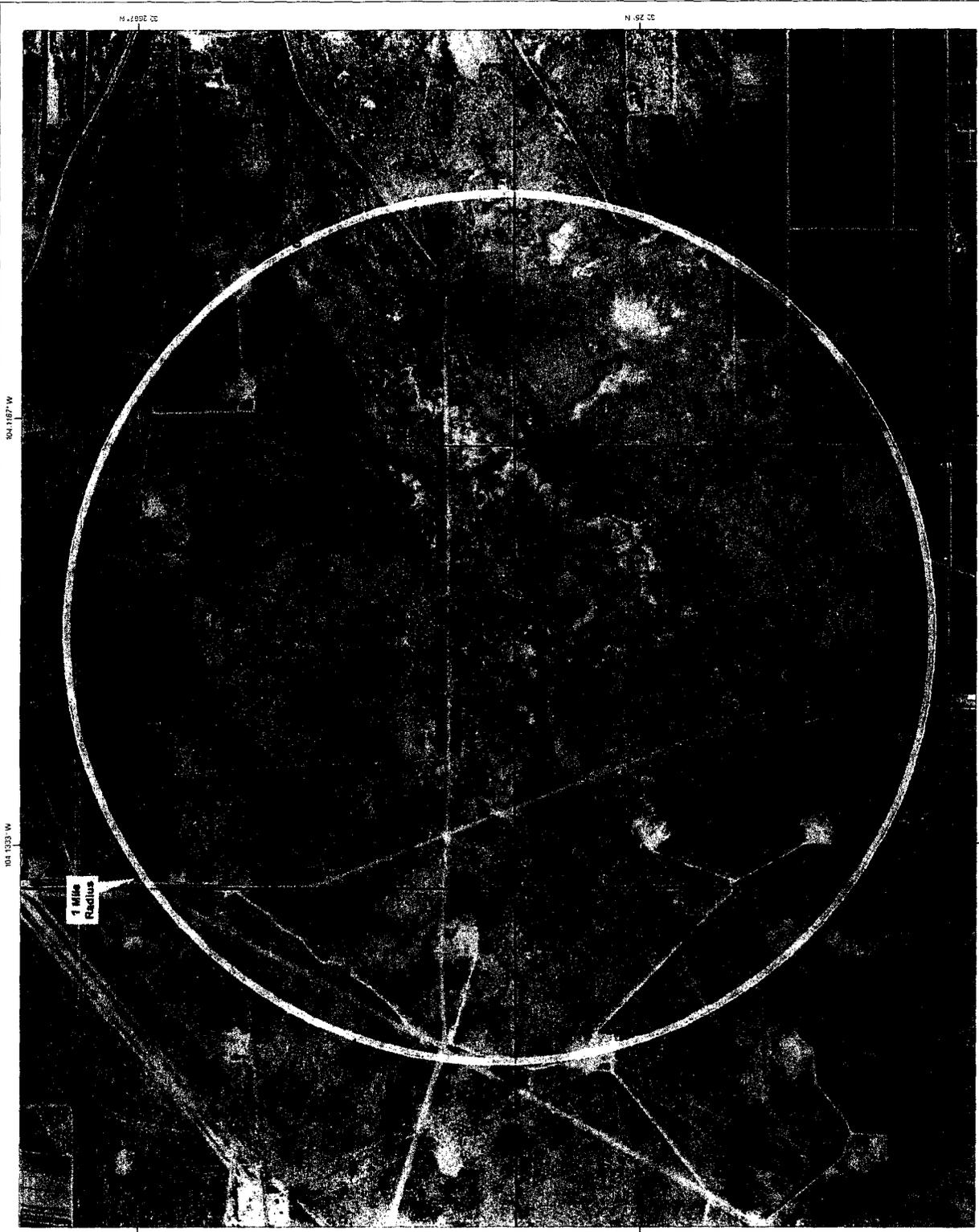
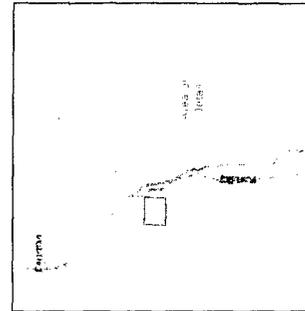
Section 31, Township 23S, Range 28E
Eddy County, New Mexico

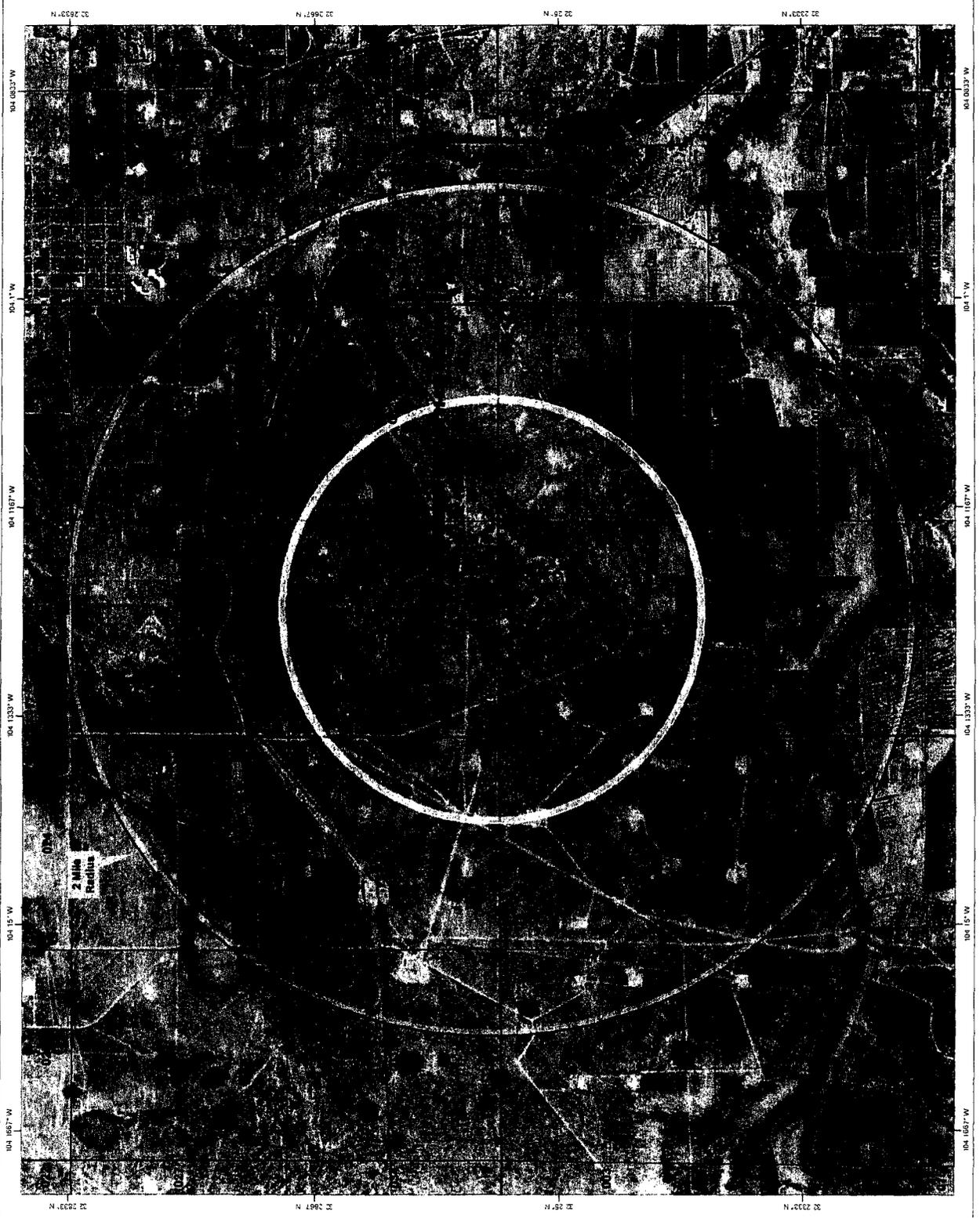


NAD 1927 New Mexico State Plane East
FPS 3001 Feet



Prepared by Permits West, Inc., May 25, 2016
for Matador Production Company





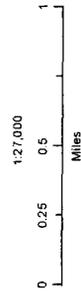
Matador Production Company

CHARLIE SWEENEY FED COM
 31-23S-28E #203H
 H2S Contingency Plan:
 2 Mile Radius Map

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



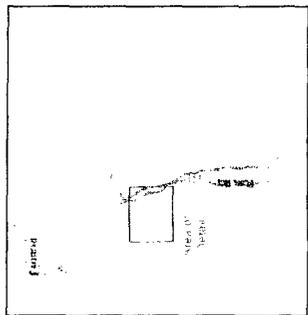
Surface Hole Location



NAD 1927 New Mexico State Plane East
 FIPS 3001 Feet



Prepared by Permits West, Inc. May 25, 2016
 for Matador Production Company



Matador Production Company

SURFACE PLAN PAGE 1

Charlie Sweeney Fed Com 203H

SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.

BHL 240' FNL & 2310' 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 0.4 mile on an existing road

Then turn right and go South 326.53' 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 (2/3 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 = 2%. Maximum cut or fill = 1'. A cattle guard will be installed in the existing fence. No culvert or vehicle turn out is needed.

Matador Production Company

SURFACE PLAN PAGE 2

Charlie Sweeney Fed Com 31-23S-28E 203H

SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.

BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.

Eddy County, NM

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 & 8-11)

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 627.47' east and then south in the same trench to Longwood Midstream's Black River Gathering System. A 3-phase raptor safe overhead power line will be built 3661.69' north to the gas plant power line that is under construction.

5. WATER SUPPLY (See MAPS 3, 12, & 13)

Water will be piped 3750.25' 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. A temporary fence will be built on the east side of the pad before construction starts to keep construction equipment out of an old canal. Top ≈ 6 " of soil and brush will be stockpiled north of the pad. Pipe racks will be to the west. A closed loop drilling system will be used. Caliche will be hauled from existing caliche pits on private land in NWSE 1-24s-28e and NWSW 6-24s-29e.

Matador Production Company

SURFACE PLAN PAGE 3

Charlie Sweeney Fed Com 31-23S-28E 203H

SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.

BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.

Eddy County, NM

7. WASTE DISPOSAL

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

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

10. RECLAMATION

Interim reclamation will 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 $\approx 21\%$ 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.

Matador Production Company

SURFACE PLAN PAGE 4

Charlie Sweeney Fed Com 31-23S-28E 203H

SHL 190' FSL & 2250' FEL Sec. 31, T. 23 S., R. 28 E.

BHL 240' FNL & 2310' FEL Sec. 31, T. 23 S., R. 28 E.

Eddy County, NM

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.

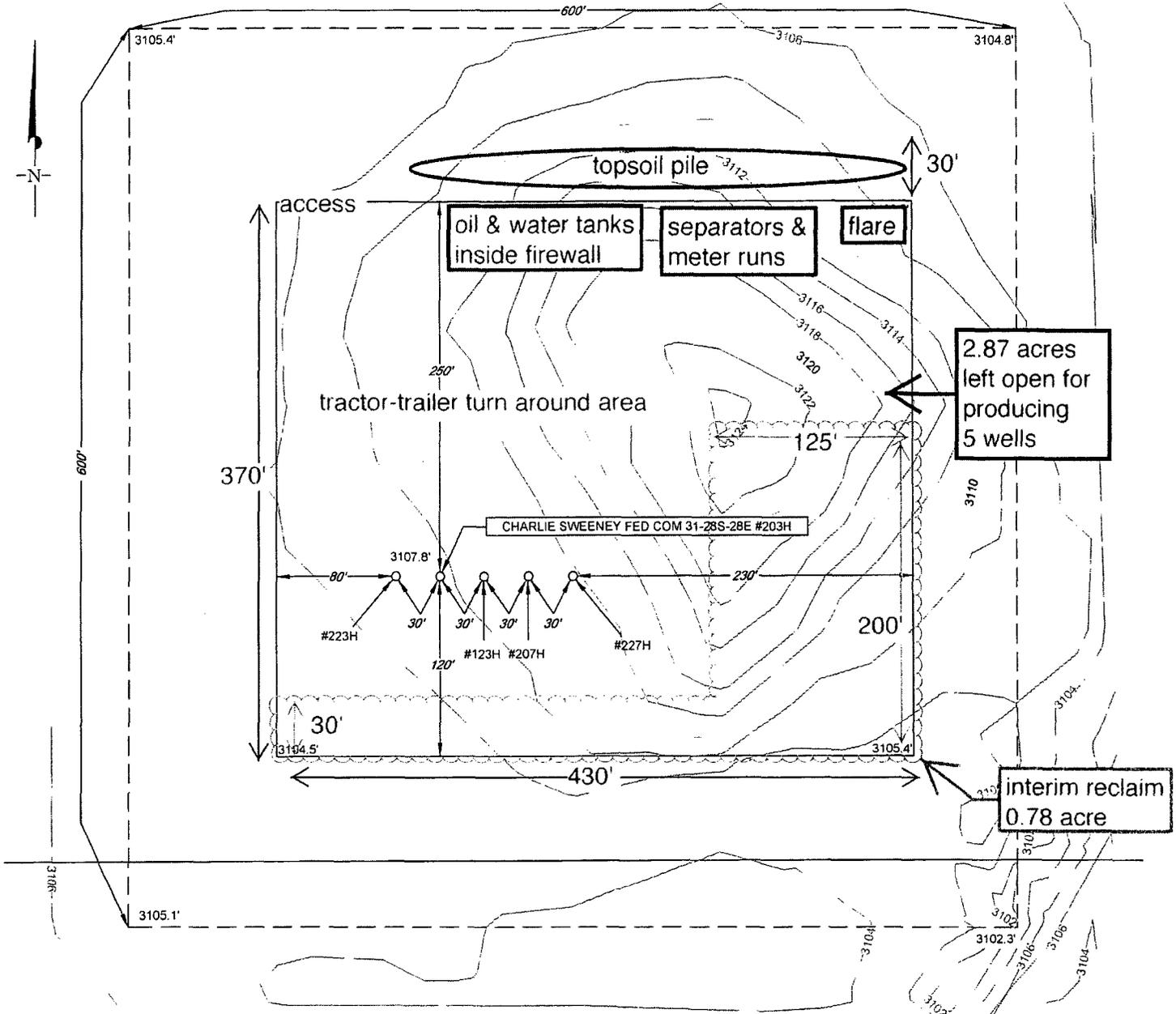
12. OTHER INFORMATION

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



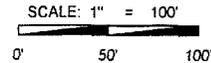
2.87 acres
left open for
producing
5 wells

interim reclaim
0.78 acre

PRODUCTION FACILITY & INTERIM RECLAMATION DIAGRAM

LEGEND

LEASE NAME & WELL NO.: CHARLIE SWEENEY FED COM 31-23S-28E #203H
#203H LATITUDE N 32.2546330 #203H LONGITUDE W 104.1250273



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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**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Matador Operating Company
LEASE NO.:	NMNM121941
WELL NAME & NO.:	203H-Charlie Sweeney Fed Com
SURFACE HOLE FOOTAGE:	190'/S & 2250'/E
BOTTOM HOLE FOOTAGE:	240'/N & 2310'/E
LOCATION:	Section 31, T. 23 S., R. 28 E., NMPM
COUNTY:	Eddy County, New Mexico

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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.

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- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Cave/Karst
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- Construction**
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- Road Section Diagram**
- Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- Interim Reclamation**
- Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Cave and Karst

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

Cave/Karst Surface Mitigation

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

Construction:

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

No Blasting:

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

Pad Berming:

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

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

Tank Battery Liners and Berms:

Tank battery locations 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, siting 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 valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

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

Rotary Drilling with Fresh Water:

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

Directional Drilling:

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

Lost Circulation:

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

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

Abandonment Cementing:

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

Pressure Testing:

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

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

G. ON LEASE ACCESS ROADS**Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

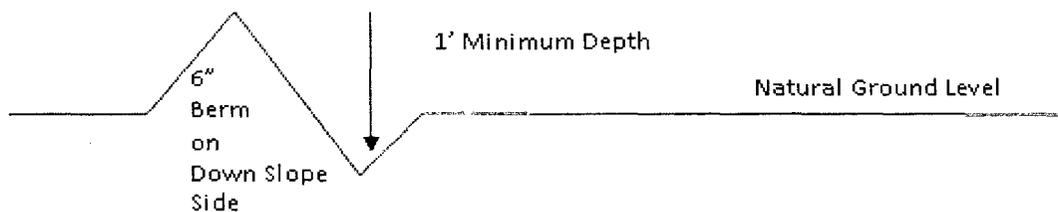
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

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

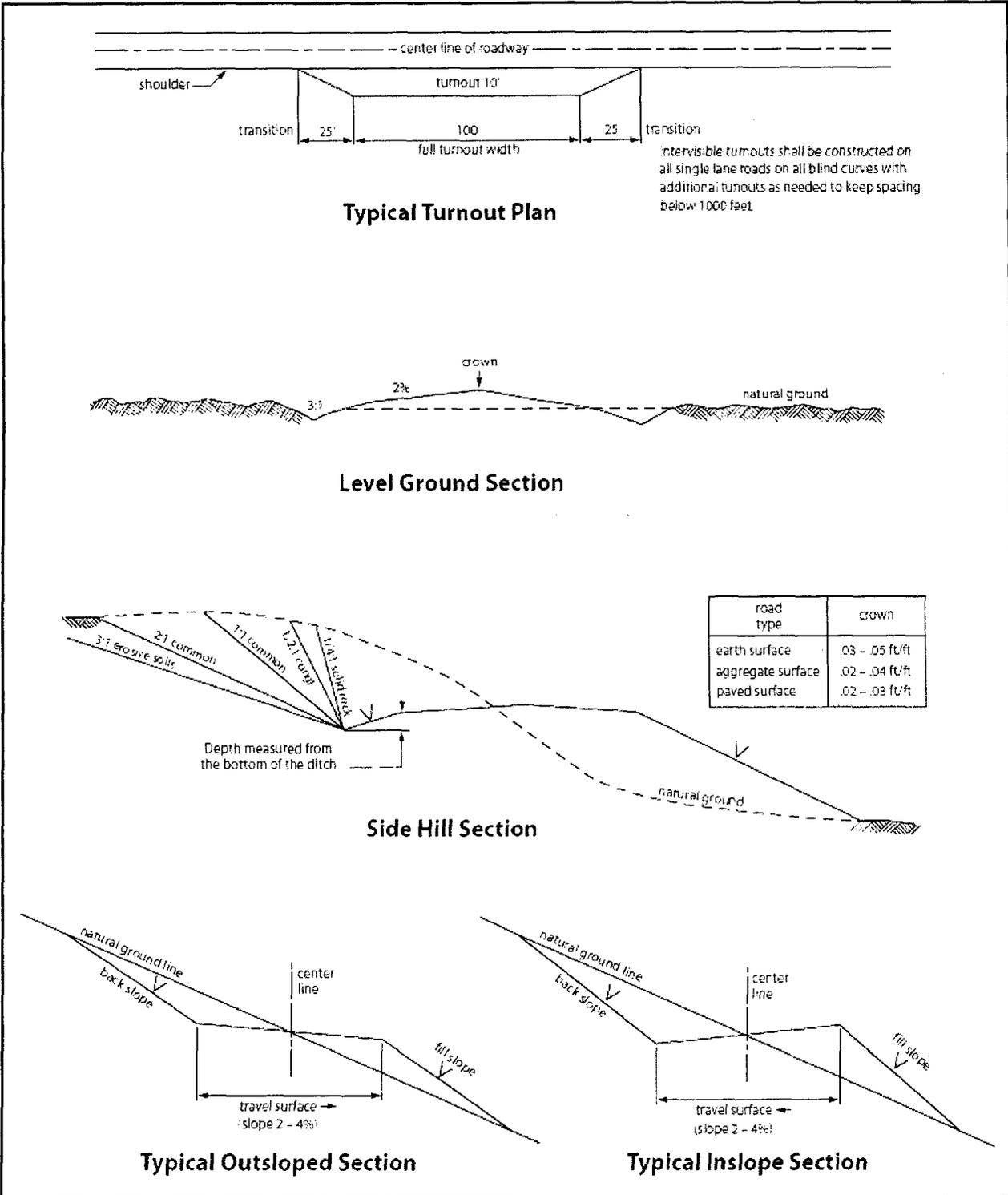


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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.

- | | |
|--|--|
| <input checked="" type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3 |
| <input type="checkbox"/> seed mixture 2 | <input type="checkbox"/> seed mixture 4 |
| <input type="checkbox"/> seed mixture 2/LPC | <input type="checkbox"/> 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 or dune 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:

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

*Pounds of pure live seed:

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

NMOCD CONDITION OF APPROVAL

The *New* Gas Capture Plan (GCP) notice is posted on the NMOCD website under Announcements. The Plan became effective May 1, 2016. A copy of the GCP form is included with the NOTICE and is also in our FORMS section under Unnumbered Forms. Please review filing dates for all applicable activities currently approved or pending and submit accordingly. Failure to file a GCP may jeopardize the operator's ability to obtain C-129 approval to flare gas after the initial 60-day completion period.