

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

N Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

NE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

58°40'44"E 2654.00 FT 58°50'43"E 2643.01 FT 58°51'40"E 2574.88 FT 58°51'00"E 2636.44 FT

Parkway West Unit

Producing Area

330' from exterior

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARINGS AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE, VERTICAL DATUM NAVD83.

Project Area

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

58°40'44"E 2654.00 FT 58°50'43"E 2643.01 FT 58°51'40"E 2574.88 FT 58°51'00"E 2636.44 FT

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

SW CORNER SEC. 39
LAT. = 32.8301287°N
LONG. = 104.1055998°W
NAD83 EAST (FT)
N = 586321.06
E = 611436.23

S Q CORNER SEC. 39
LAT. = 32.8309810°N
LONG. = 104.1066707°W
NAD83 EAST (FT)
N = 586313.14
E = 614091.84

SE CORNER SEC. 39
LAT. = 32.8309668°N
LONG. = 104.0883927°W
NAD83 EAST (FT)
N = 586311.43
E = 616734.90

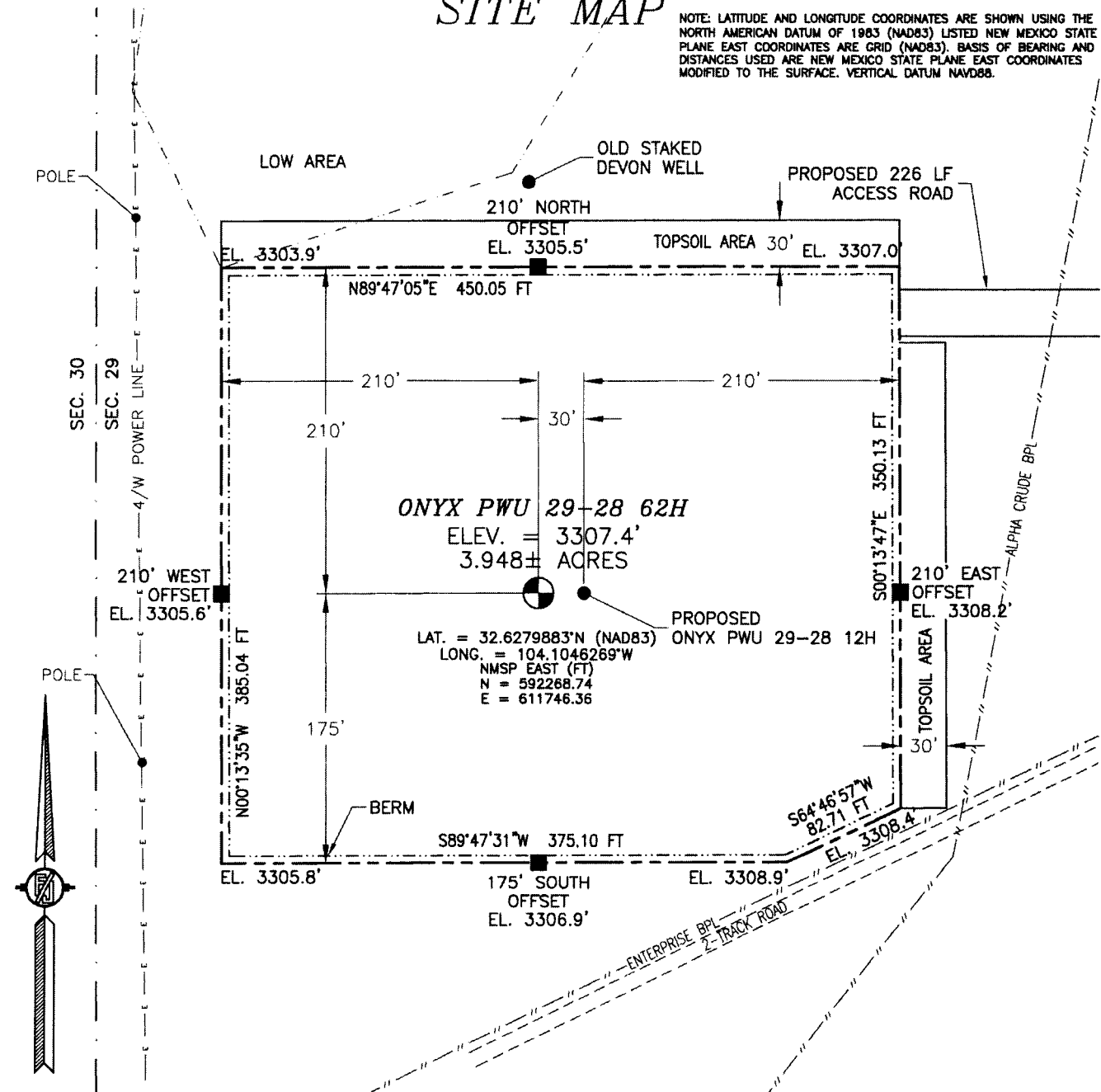
M Q CORNER SEC. 38
LAT. = 32.8300567°N
LONG. = 104.0796189°W
NAD83 EAST (FT)
N = 586308.14
E = 619374.13

NE CORNER SEC. 38
LAT. = 32.8306570°N
LONG. = 104.0712463°W
NAD83 EAST (FT)
N = 586312.65
E = 623312.94

58°40'44"E 2654.00 FT 58°50'43"E 2643.01 FT 58°51'40"E 2574.88 FT 58°51'00"E 2636.44 FT

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83) LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. VERTICAL DATUM NAVD88.



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP ROAD) AND CR 235 (CURRY COMBS ROAD) GO SOUTHEAST & EAST ON CR 235 APPROX. 6.5 MILES TO A LEASE ROAD ON RIGHT (SOUTH) TURN SOUTH ON LEASE ROAD GO APPROX. 2.1 MILES TO ROAD LATH ON RIGHT (WEST) GO WEST 226' TO THE NORTHEAST PAD CORNER FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

ONYX PWU 29-28 62H

LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.

EDDY COUNTY, STATE OF NEW MEXICO

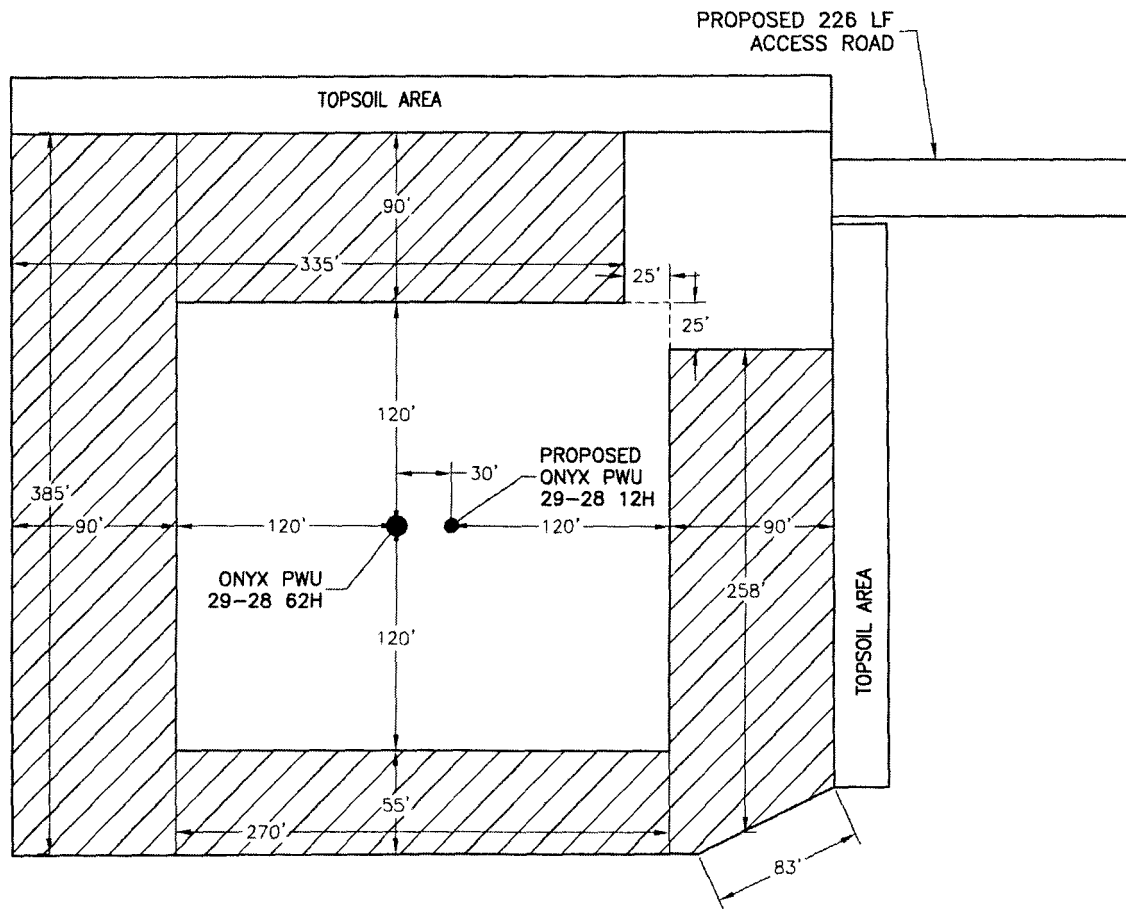
JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
INTERIM SITE BUILD PLAN



 DENOTES INTERIM PAD RECLAMATION AREA
2.171± ACRES

010 50 100 200
SCALE 1" = 100'

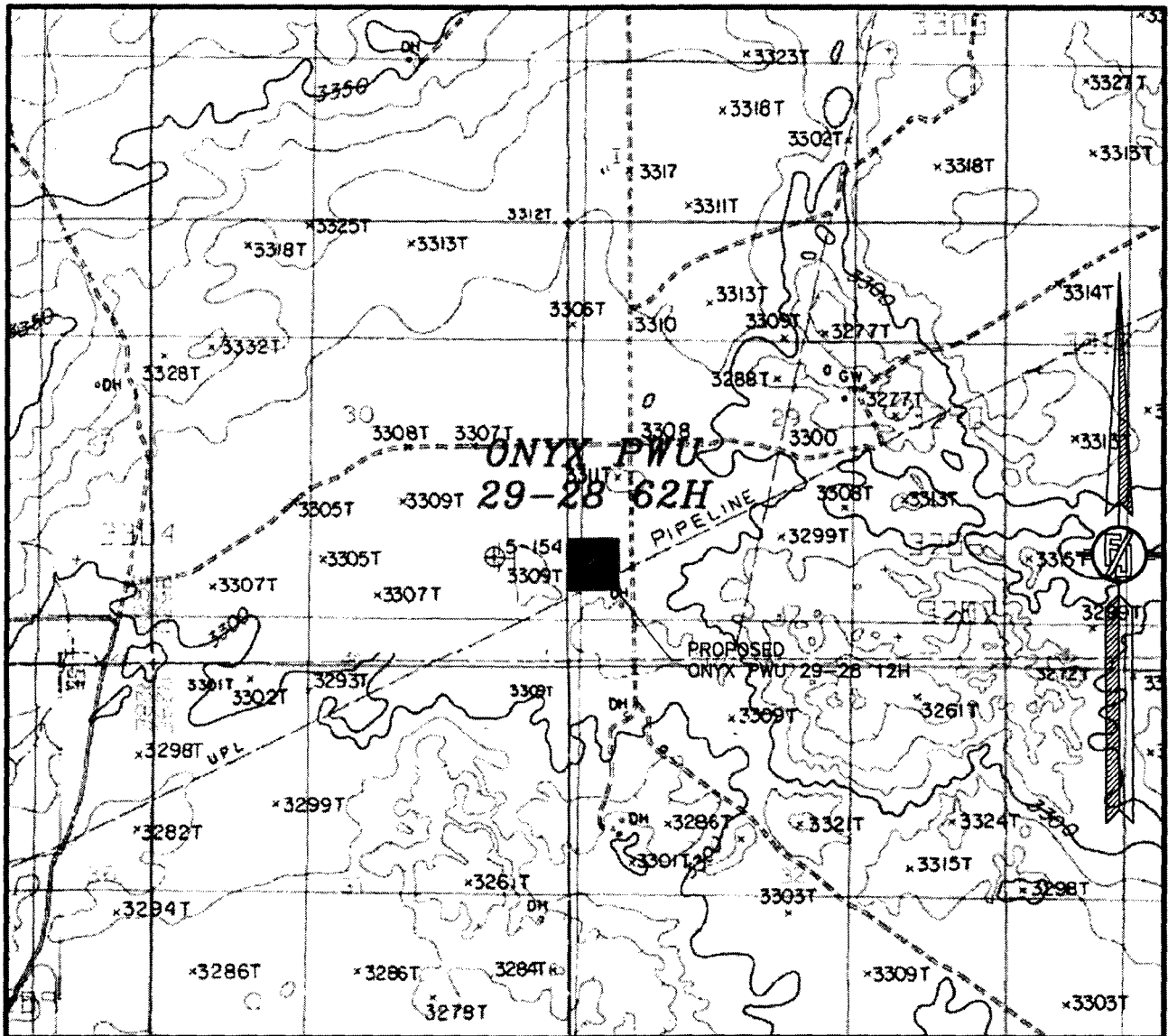
DEVON ENERGY PRODUCTION COMPANY, L.P.
ONYX PWU 29-28 62H
LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
ILLINOIS CAMP NE

NOT TO SCALE

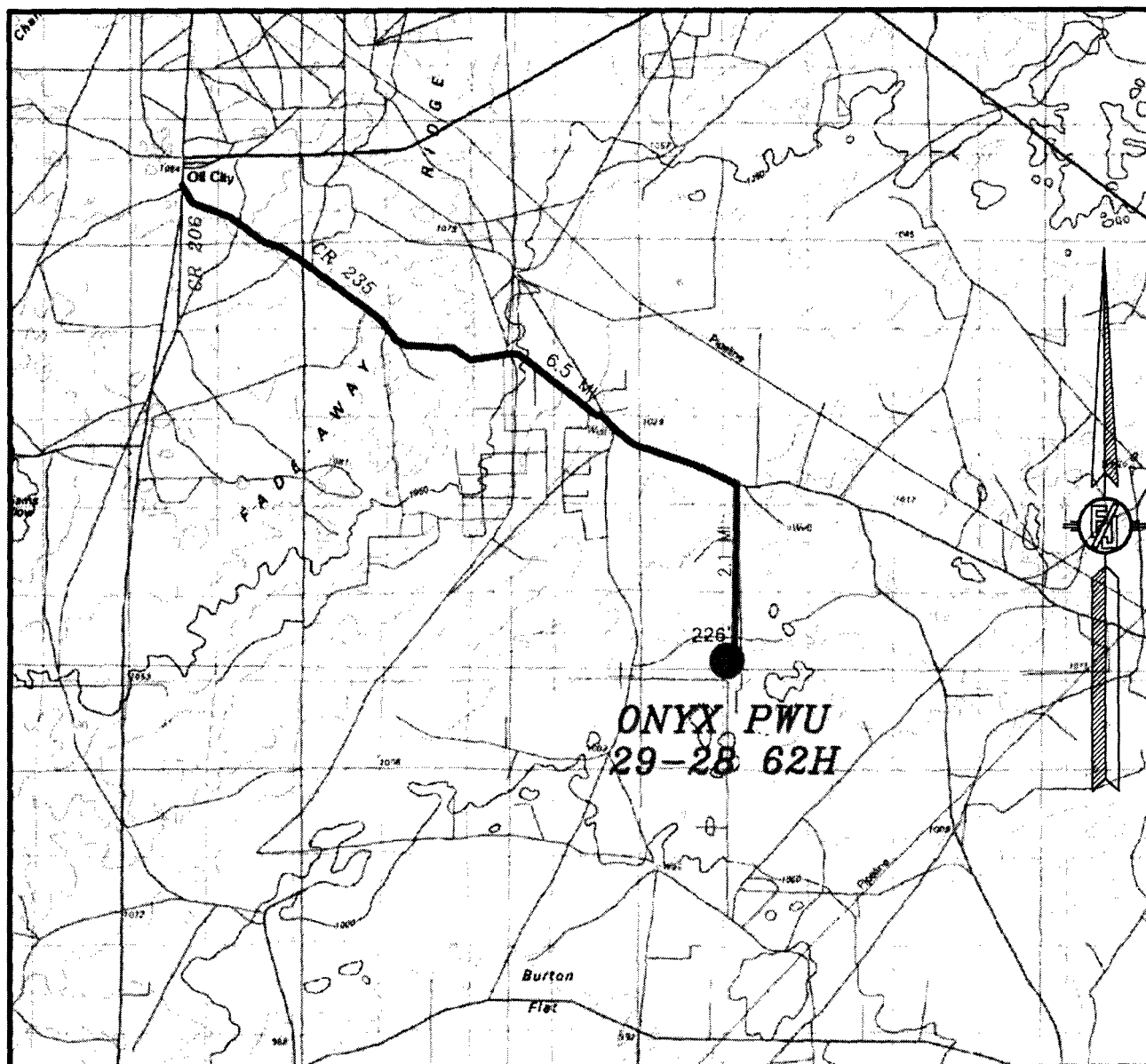
DEVON ENERGY PRODUCTION COMPANY, L.P.
ON YX PWU 29-28 62H
LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
ONYX PWU 29-28 62H

LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP ROAD) AND CR 235 (CURRY COMBS ROAD) GO SOUTHEAST & EAST ON CR 235 APPROX. 6.5 MILES TO A LEASE ROAD ON RIGHT (SOUTH) TURN SOUTH ON LEASE ROAD GO APPROX. 2.1 MILES TO ROAD LATH ON RIGHT (WEST) GO WEST 226' TO THE NORTHEAST PAD CORNER FOR THIS LOCATION.

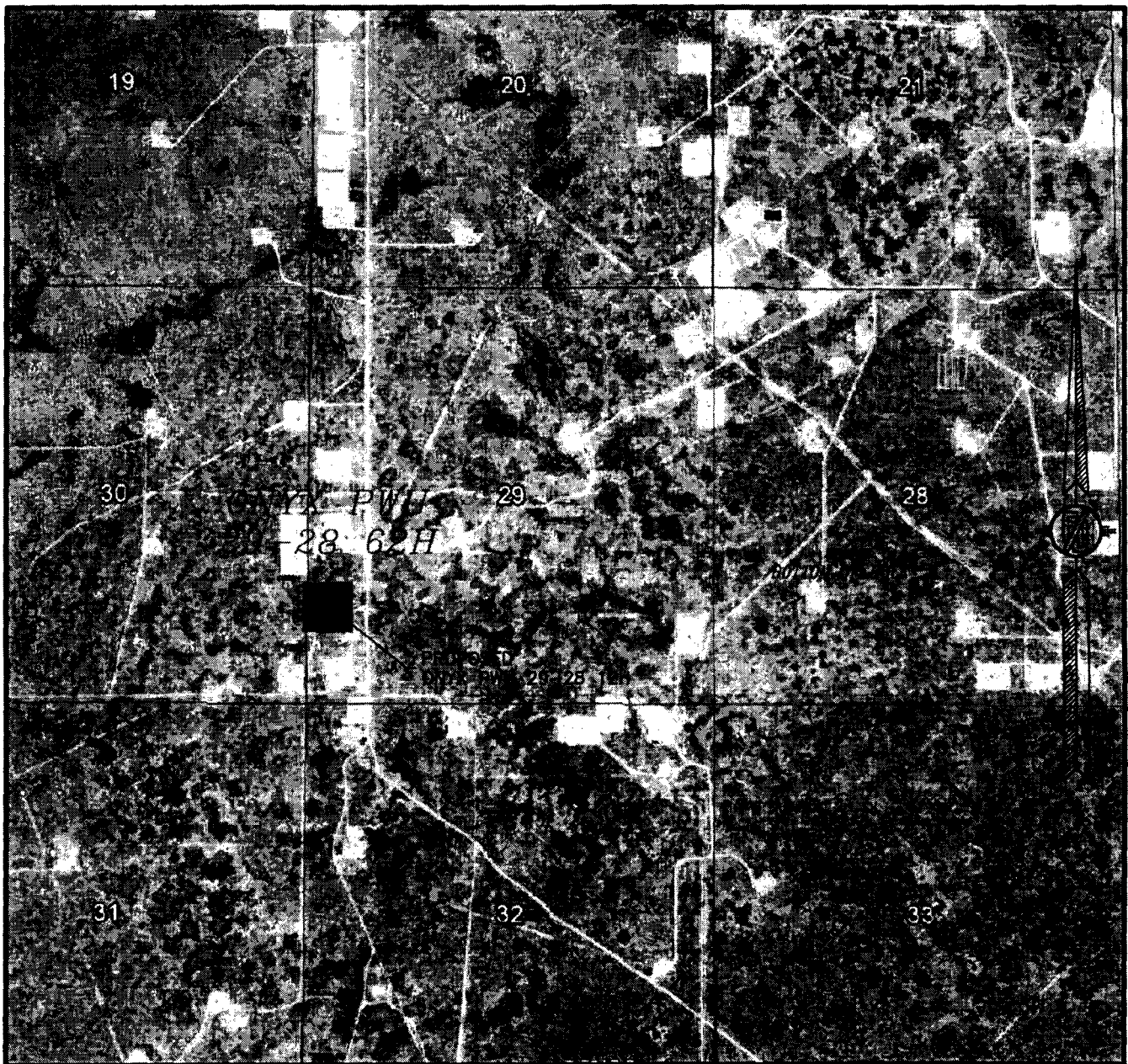
JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MARCH 2018

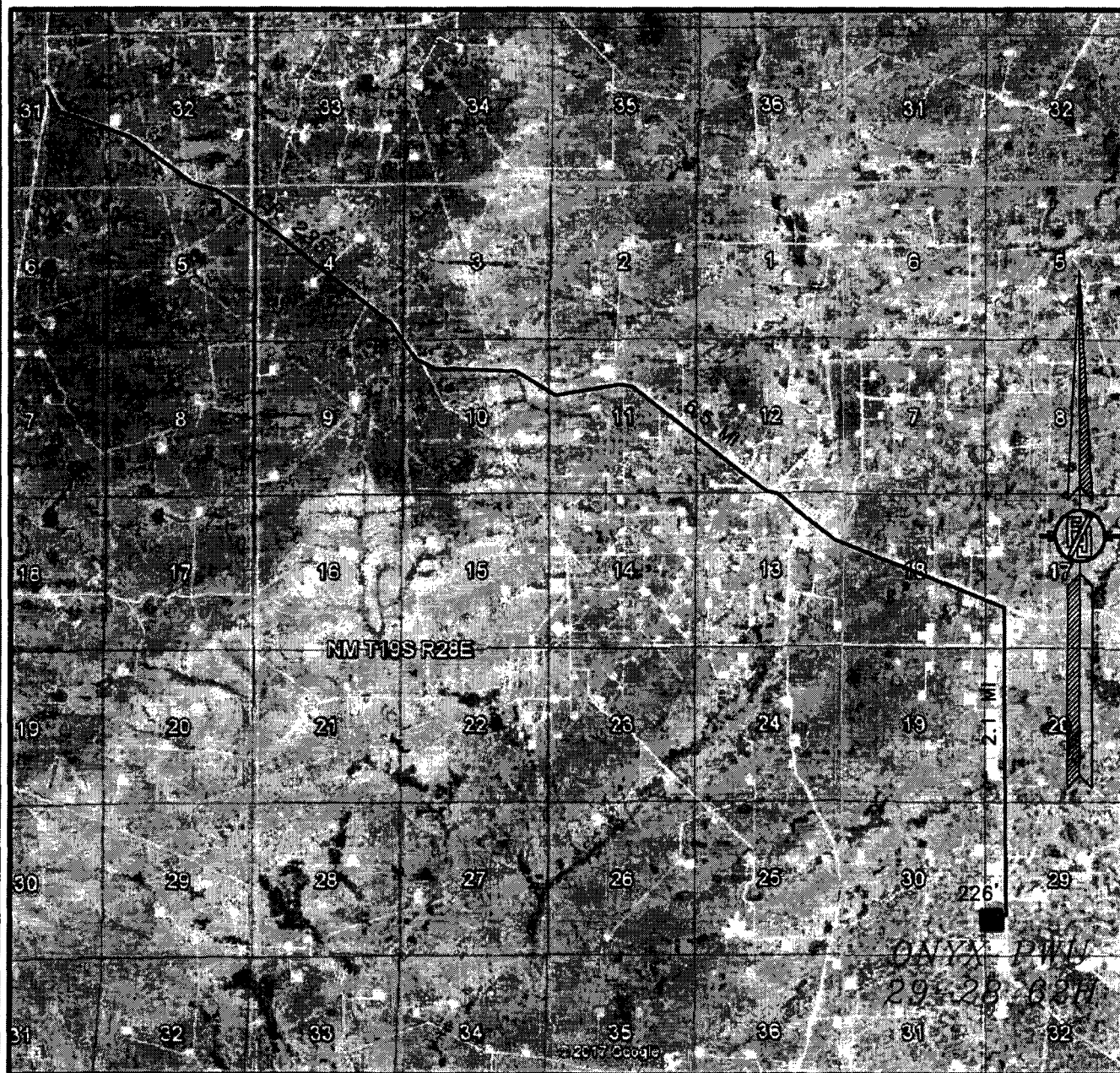
DEVON ENERGY PRODUCTION COMPANY, L.P.
ONYX PWU 29-28 62H
LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 ACCESS AERIAL ROUTE MAP



NOT TO SCALE
 AERIAL PHOTO:
 GOOGLE EARTH
 MARCH 2016

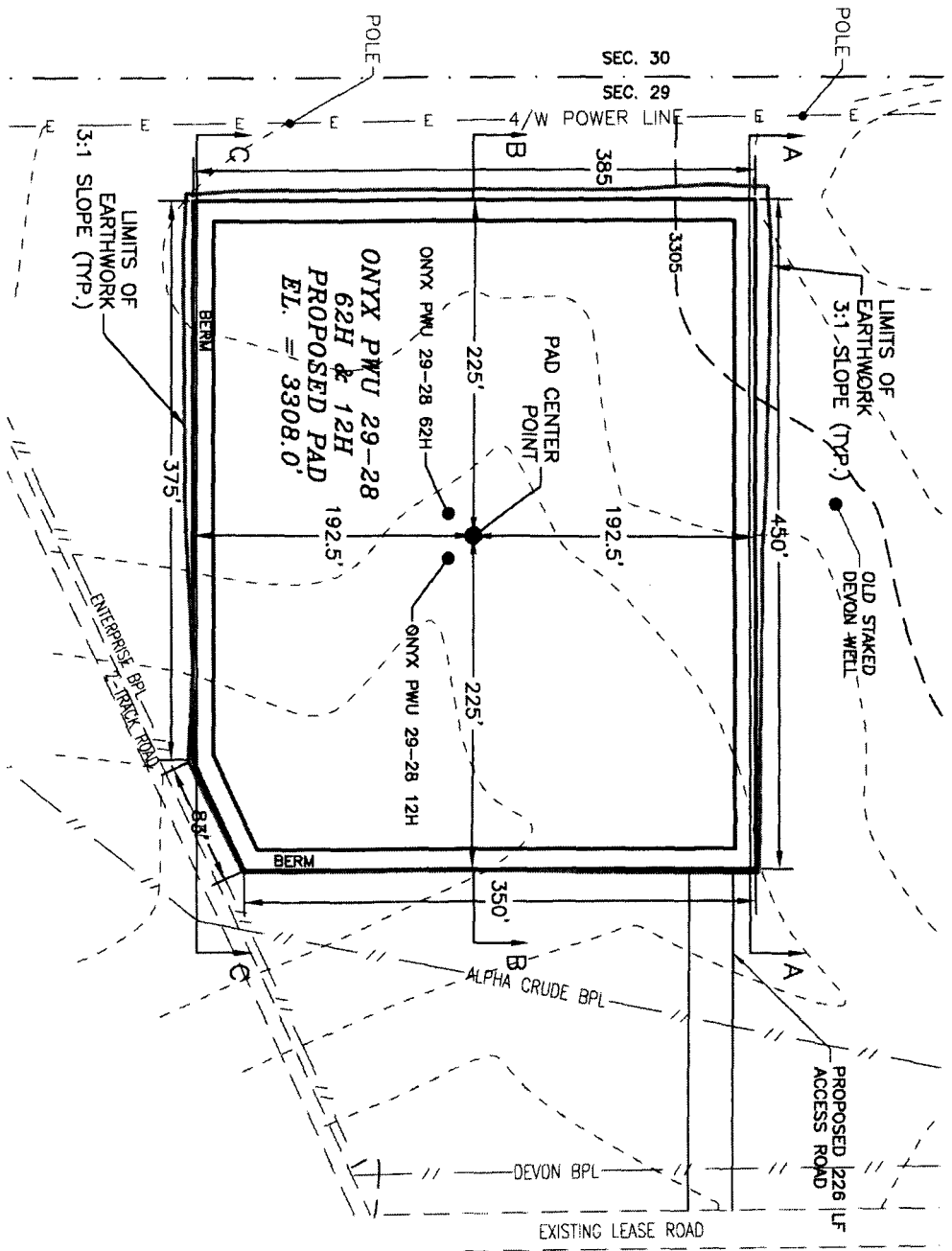
DEVON ENERGY PRODUCTION COMPANY, L.P.
ONXX PWU 29-28 62H
 LOCATED 1235 FT. FROM THE SOUTH LINE
 AND 292 FT. FROM THE WEST LINE OF
 SECTION 29, TOWNSHIP 19 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
 GRADING PLAN AND CROSS SECTIONS
ONTX PWU 29-28 62H
 SECTION 29, TOWNSHIP 19 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

MADRON SURVEYING, INC. 301 SOUTH CANAL (375) 234-3341 CARLSBAD, NEW MEXICO

CUT	FILL	NET
230 CU. YD	9256 CU. YD	9026 CU. YD (FILL)

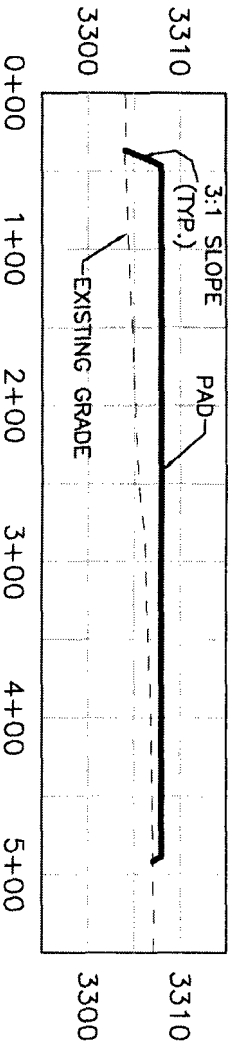
EARTHWORK QUANTITIES ARE ESTIMATED



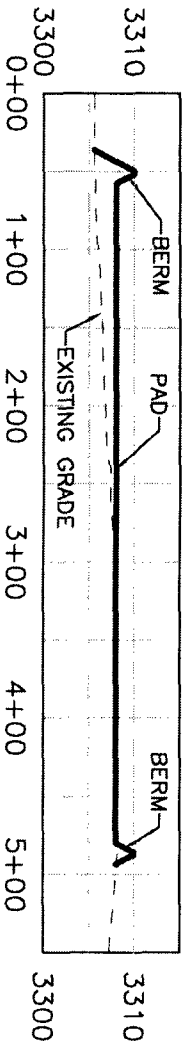
SHEET 1-2
 SURVEY NO. 6215

CROSS SECTIONS

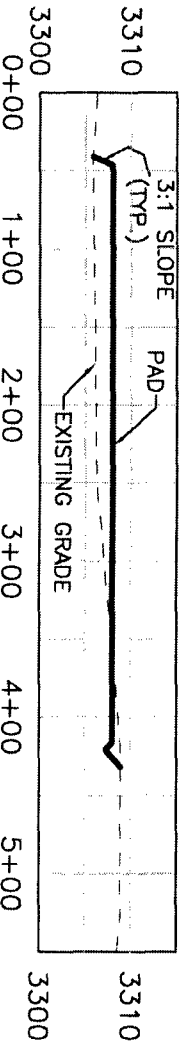
SECTION A-A



SECTION B-B



SECTION C-C

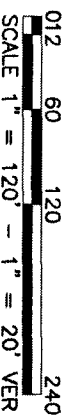


DEVON ENERGY PRODUCTION COMPANY, L.P.
GRADING PLAN AND CROSS SECTIONS
ONLY PMU 29-28 62H
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 16, 2017

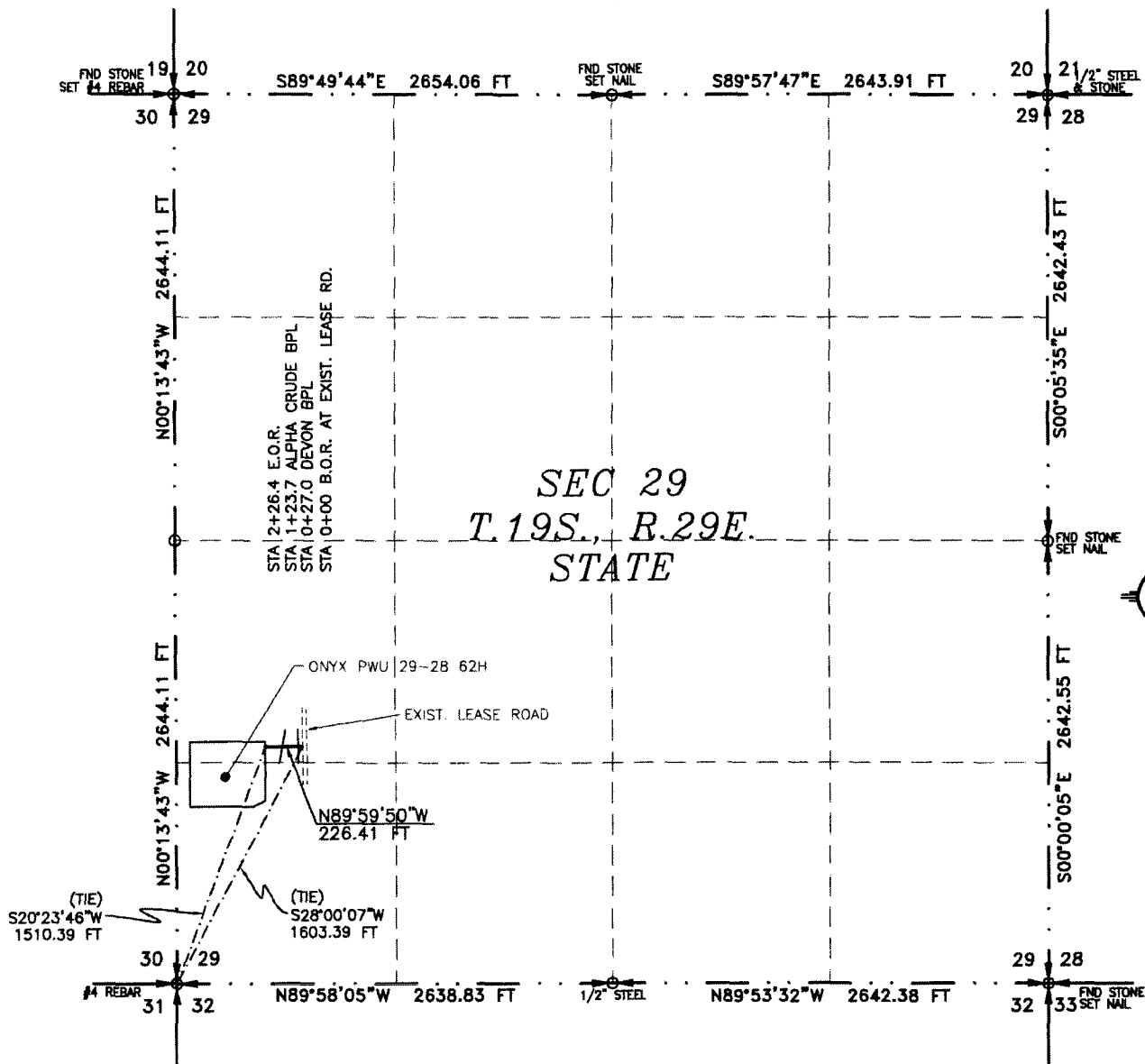
MADRON SURVEYING, INC. 301 SOUTH CANAL (975) 234-3341 CARLSBAD, NEW MEXICO

SHEET 2-2 SURVEY NO. 6216

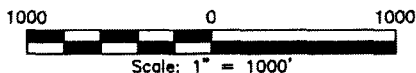


ACCESS ROAD PLAT
ACCESS ROAD TO THE ONYX PWU 29-28 62H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 15, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-2

MADRON SURVEYING, INC. 501 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 15 DAY OF JULY 2017

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 5215

ACCESS ROAD PLAT
ACCESS ROAD TO THE ONYX PWU 29-28 62H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 15, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 SW/4 OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S28°00'07"W, A DISTANCE OF 1603.39 FEET;

THENCE N89°59'50"W A DISTANCE OF 226.41 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S20°23'46"W, A DISTANCE OF 1510.39 FEET;

SAID STRIP OF LAND BEING 226.41 FEET OR 13.72 RODS IN LENGTH, CONTAINING 0.156 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4 226.41 L.F. 13.72 RODS 0.156 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 18 DAY OF JULY 2017

[Signature]
FILIMON F. JARAMILLO, P.S. 12797
MADRON SURVEYING, INC.
201 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 2-2

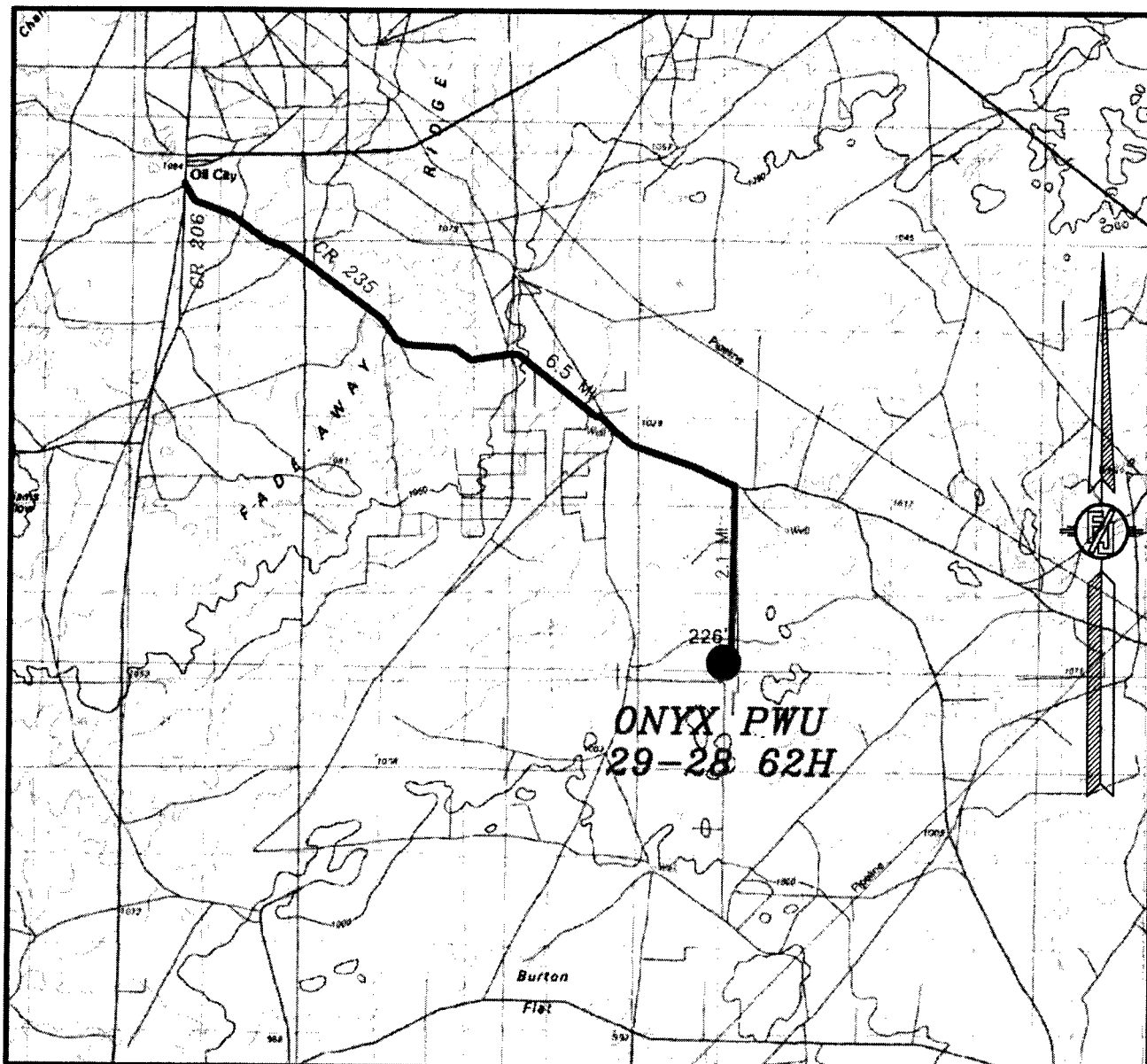
MADRON SURVEYING, INC.

201 SOUTH CANAL
(575) 234-3341

SURVEY NO. 5215

CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

ONYX PWU 29-28 62H

LOCATED 1235 FT. FROM THE SOUTH LINE

AND 292 FT. FROM THE WEST LINE OF

SECTION 29, TOWNSHIP 19 SOUTH,

RANGE 29 EAST, N.M.P.M.

EDDY COUNTY, STATE OF NEW MEXICO

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 206 (ILLINOIS CAMP ROAD) AND CR 235 (CURRY COMBS ROAD) GO SOUTHEAST & EAST ON CR 235 APPROX. 6.5 MILES TO A LEASE ROAD ON RIGHT (SOUTH) TURN SOUTH ON LEASE ROAD GO APPROX. 2.1 MILES TO ROAD LATH ON RIGHT (WEST) GO WEST 226' TO THE NORTHEAST PAD CORNER FOR THIS LOCATION.

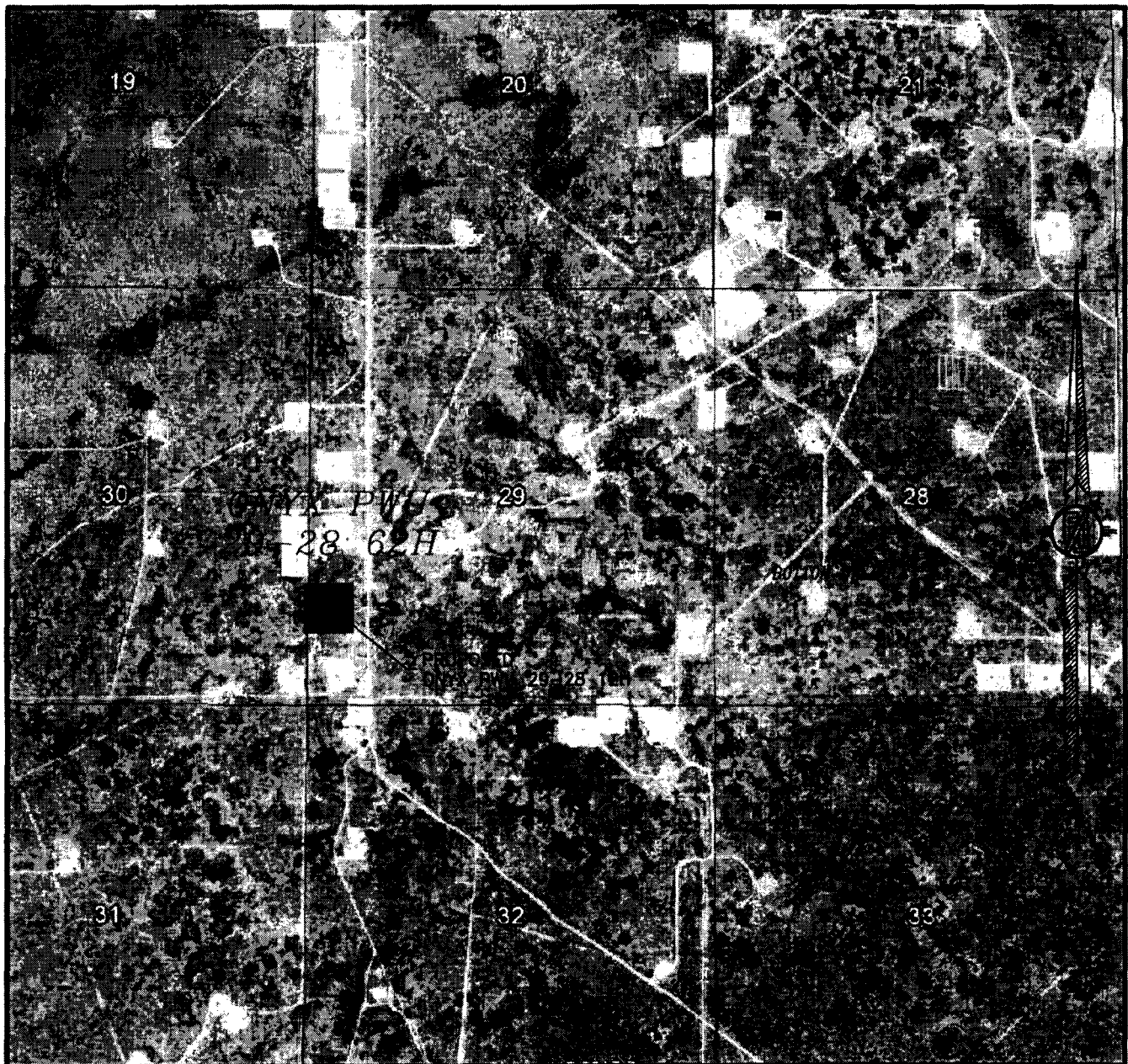
JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MARCH 2016

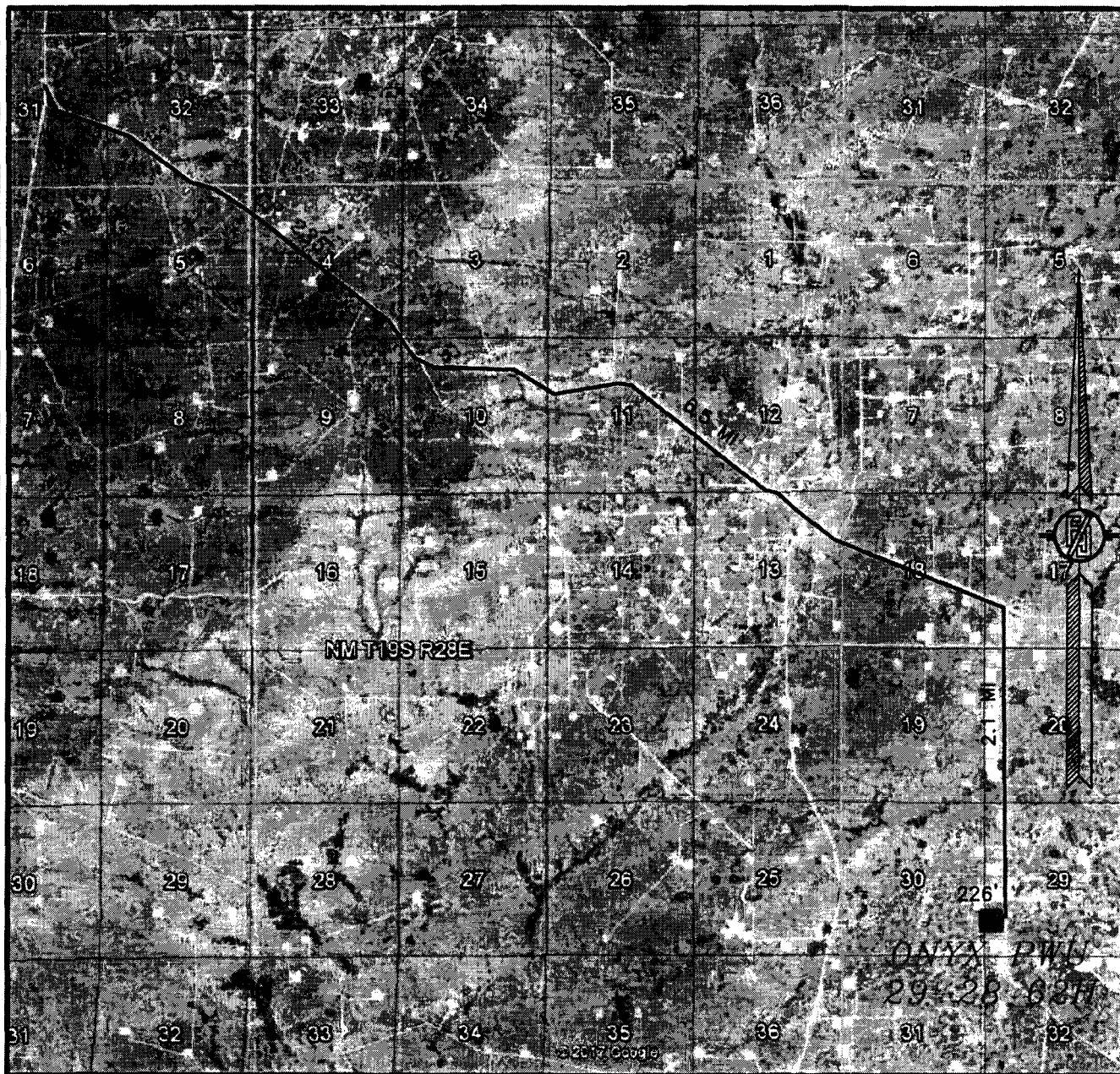
DEVON ENERGY PRODUCTION COMPANY, L.P.
ONYX PWU 29-28 62H
LOCATED 1235 FT. FROM THE SOUTH LINE
AND 292 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 ACCESS AERIAL ROUTE MAP



NOT TO SCALE
 AERIAL PHOTO:
 GOOGLE EARTH
 MARCH 2016

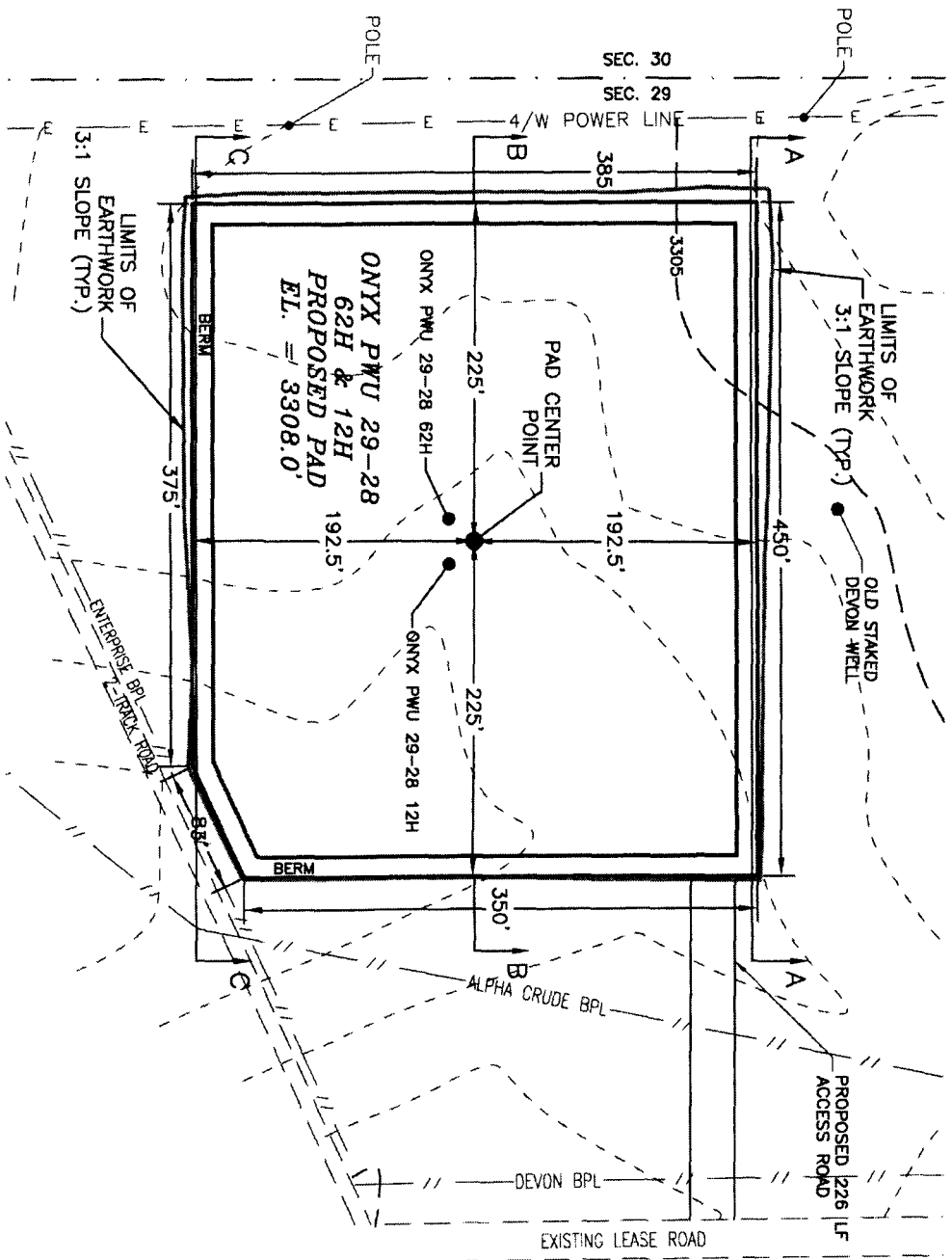
DEVON ENERGY PRODUCTION COMPANY, L.P.
 ONYX PWU 29-28 62H
 LOCATED 1235 FT. FROM THE SOUTH LINE
 AND 292 FT. FROM THE WEST LINE OF
 SECTION 29, TOWNSHIP 19 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 15, 2017

SURVEY NO. 5215

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
 GRADING PLAN AND CROSS SECTIONS
ONYX PWU 29-28 62H
 SECTION 29, TOWNSHIP 19 SOUTH,
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 16, 2017

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

CUT	FILL	NET
230 CU. YD	9256 CU. YD	9026 CU. YD (FILL)

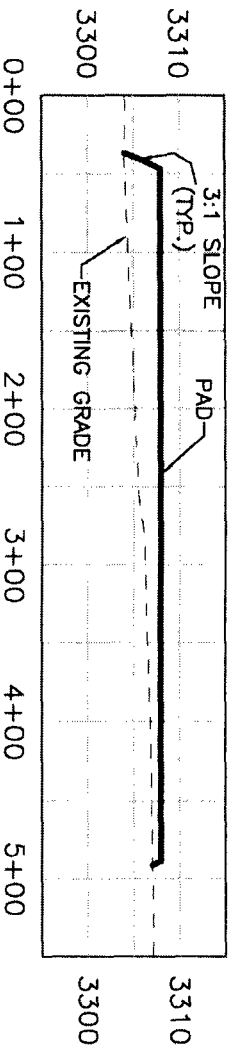
EARTHWORK QUANTITIES ARE ESTIMATED



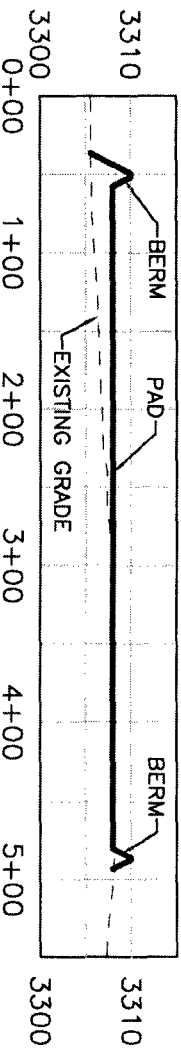
SHEET 1-2
 SURVEY NO. 6216

CROSS SECTIONS

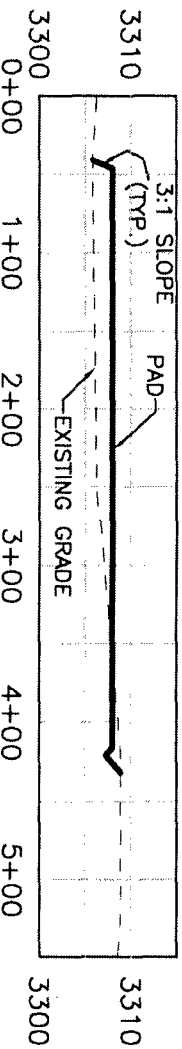
SECTION A-A



SECTION B-B



SECTION C-C



DEVON ENERGY PRODUCTION COMPANY, L.P.
GRADING PLAN AND CROSS SECTIONS
ONTX PTU 29-28 62H
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

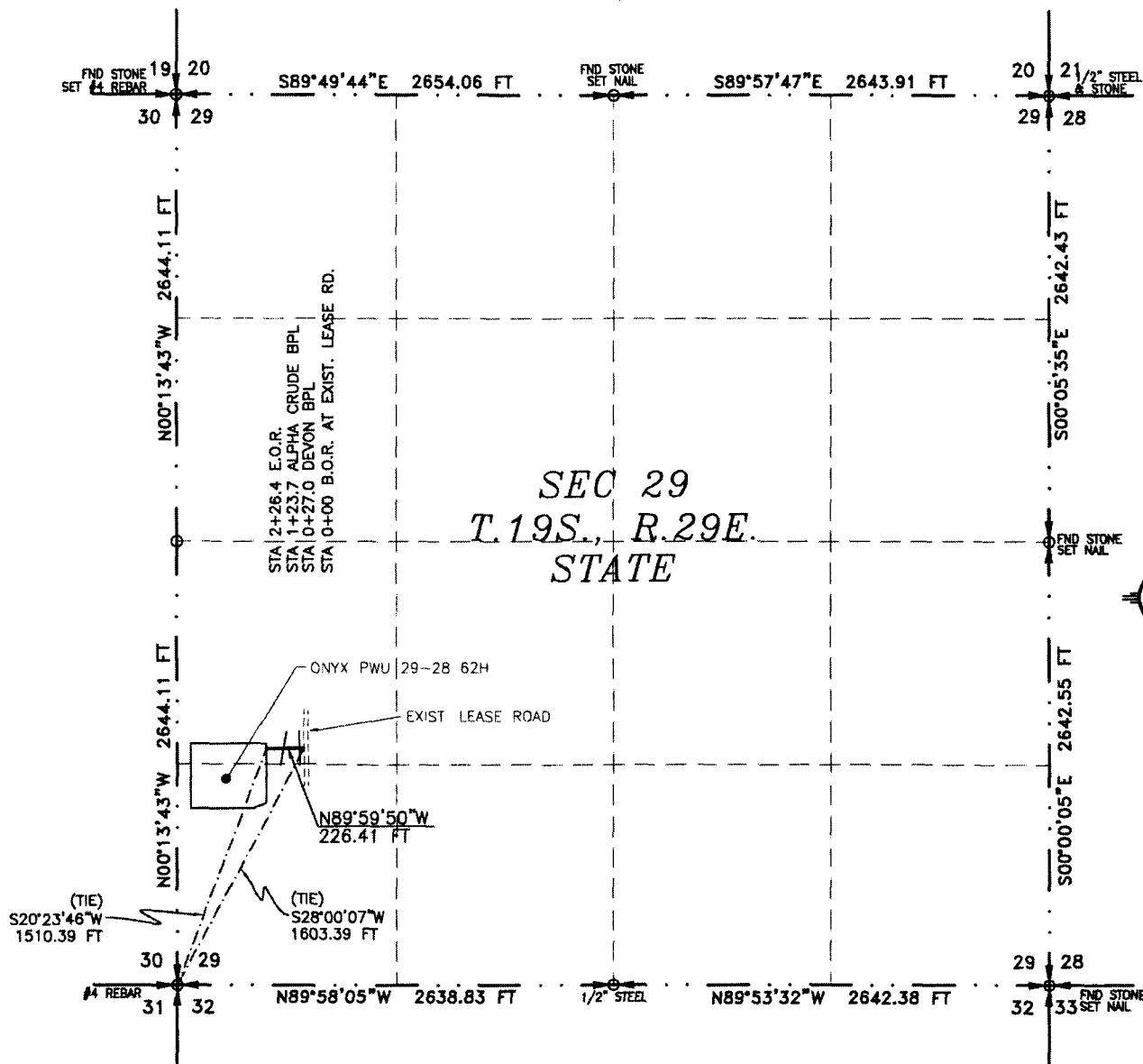
012 60 120 240
SCALE 1" = 120' - 1" = 20' VER

MADRON SURVEYING, INC. JULY 16, 2017
301 SOUTH CANAL (375) 234-3341 CARLSBAD, NEW MEXICO

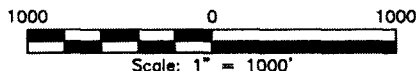
SHEET 8-2
SURVEY NO. 6215

ACCESS ROAD PLAT
ACCESS ROAD TO THE ONYX PWU 29-28 62H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 15, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-2

MADRON SURVEYING, INC. 4001 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 19 DAY OF JULY 2017

FILIMON F. JARAMILLO, PLS. 12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 5215

ACCESS ROAD PLAT
ACCESS ROAD TO THE ONYX PWU 29-28 62H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 15, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 SW/4 OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S28°00'07"W, A DISTANCE OF 1603.39 FEET;
THENCE N89°59'50"W A DISTANCE OF 226.41 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 29, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M. BEARS S20°23'46"W, A DISTANCE OF 1510.39 FEET;

SAID STRIP OF LAND BEING 226.41 FEET OR 13.72 RODS IN LENGTH, CONTAINING 0.156 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4 226.41 L.F. 13.72 RODS 0.156 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 2-2

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 18 DAY OF JULY 2017

[Signature]
FILIMON F. JARAMILLO, P.S. 12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341

SURVEY NO. 5215

Devon Energy

Project: Eddy County, NM (NAD-83)

Site: Onyx PWU 29-28

Well: 62H

Wellbore: OH
Design: Plan #2

3307.4' GE + 23.5' KB @ 3330.90usft
Ground Level: 3307.40



Azimuths to Grid North
True North: -0.12°
Magnetic North: 7.31°

Magnetic Field
Strength: 48198.7nT
Dip Angle: 60.50°
Date: 6/28/2017
Model: HDGM

PROJECT DETAILS: Eddy County, NM (NAD-83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

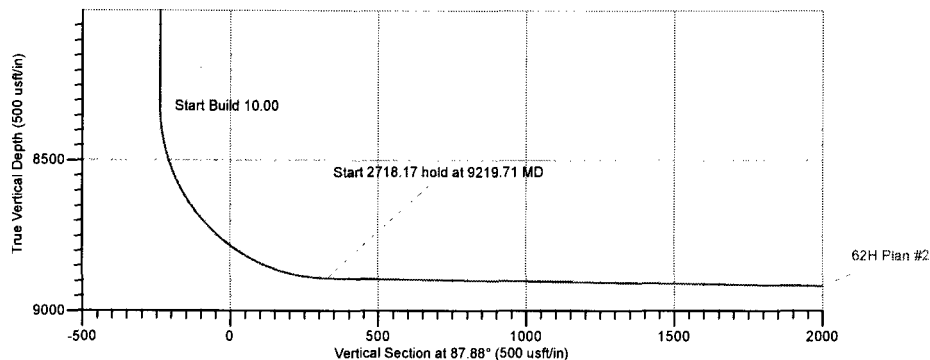
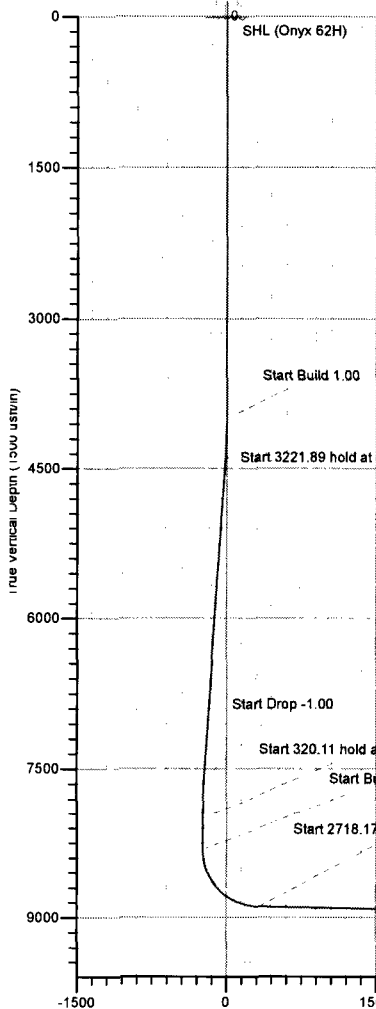


SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.00
4393.15	3.93	284.48	4392.85	3.37	-13.06	1.00	284.48	-12.92	Start 3221.89 hold at 4393.15 MD
7615.05	3.93	284.48	7607.15	58.61	-226.94	0.00	0.00	-224.63	Start Drop -1.00
8008.20	0.00	0.00	8000.00	61.98	-240.00	1.00	180.00	-237.55	Start 320.11 hold at 8008.20 MD
8328.31	0.00	0.00	8320.11	61.98	-240.00	0.00	0.00	-237.55	Start Build 10.00
9219.71	89.14	90.00	8893.00	61.98	324.36	10.00	90.00	326.43	Start 2718.17 hold at 9219.71 MD
11937.88	89.14	90.00	8933.80	61.98	3042.23	0.00	0.00	3042.44	Start DLS 1.00 TFO -90.04
12491.82	89.14	84.46	8942.12	88.74	3595.24	1.00	-90.04	3596.06	Start 1720.00 hold at 12491.82 MD
14211.82	89.14	84.46	8967.94	254.77	5307.01	0.00	0.00	5312.80	Start DLS 1.00 TFO 90.13
14765.09	89.13	89.99	8976.29	281.52	5859.36	1.00	90.13	5865.76	Start 1763.09 hold at 14765.09 MD
16528.18	89.13	89.99	9003.00	281.73	7622.24	0.00	0.00	7627.44	TD at 16528.18

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PBHL (Onyx 62H)	9003.00	281.73	7622.24	32° 37' 43.374 N	104° 4' 47.517 W
SHL (Onyx 62H)	0.00	0.00	0.00	32° 37' 40.758 N	104° 6' 16.657 W



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #2 (62H/OH)
Onyx PWU 29-28
Created By: Dustin Ault Date: 12:00, July 28 2017
Date: _____
Approved: _____ Date: _____

Devon Energy

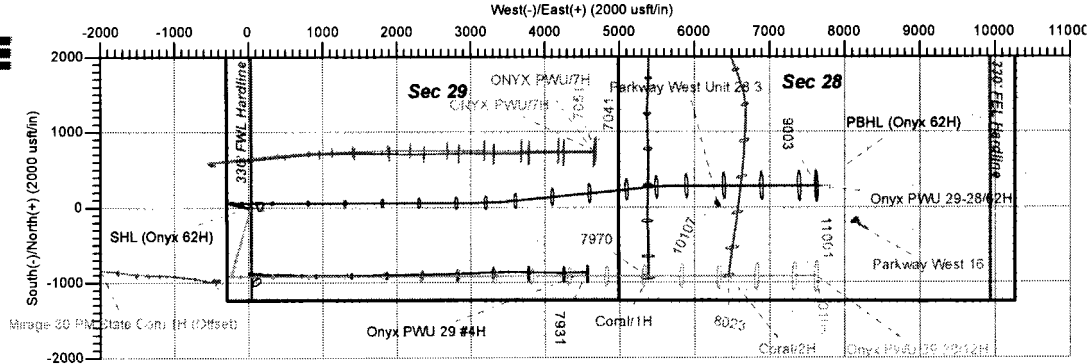
Project: Eddy County, NM (NAD-83)
Site: Onyx PWU 29-28
Well: 62H
Wellbore: OH
Design: Plan #2

devon



Azimuths to Grid North
True North: -0.12°
Magnetic North: 7.31°

Magnetic Field
Strength: 48198.7 nT
Dip Angle: 60.50°
Date: 6/28/2017
Model: HDGM



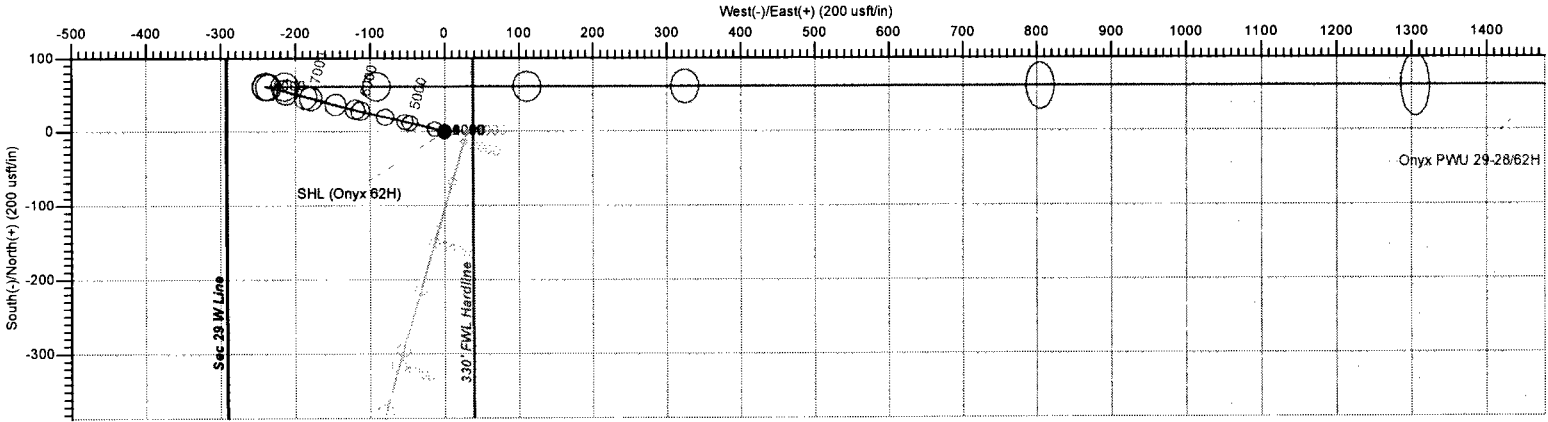
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL (Onyx 62H)	0.00	0.00	0.00	592268.74	611746.36	32° 37' 40.758 N	104° 6' 16.657 W
PBHL (Onyx 62H)	9003.00	281.73	7622.24	592550.47	619368.60	32° 37' 43.374 N	104° 4' 47.517 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.00
4393.15	3.93	284.48	4392.85	3.37	-13.06	1.00	284.48	-12.92	Start 3221.89 hold at 4393.15 MD
7615.05	3.93	284.48	7607.15	58.61	-226.94	0.00	0.00	-224.63	Start Drop -1.00
8008.20	0.00	0.00	8000.00	61.98	-240.00	1.00	180.00	-237.55	Start 320.11 hold at 8008.20 MD
8328.31	0.00	0.00	8320.11	61.98	-240.00	0.00	0.00	-237.55	Start Build 10.00
9219.71	89.14	90.00	8893.00	61.98	324.36	10.00	90.00	326.43	Start 2718.17 hold at 9219.71 MD
11937.88	89.14	90.00	8933.80	61.98	3042.23	0.00	0.00	3042.44	Start DLS 1.00 TFO -90.04
12491.82	89.14	84.46	8942.12	88.74	3595.24	1.00	-90.04	3595.06	Start 1720.00 hold at 12491.82 MD
14211.82	89.14	84.46	8957.94	254.77	5307.01	0.00	0.00	5312.80	Start DLS 1.00 TFO 90.13
14765.09	89.13	89.99	8976.29	281.52	5859.36	1.00	90.13	5865.76	Start 1763.09 hold at 14765.09 MD
16528.18	89.13	89.99	9003.00	281.73	7622.24	0.00	0.00	7627.44	TD at 16528.18

PROJECT DETAILS: Eddy County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax 936/756-7595

Plan: Plan #2 (62H/OH)
Onyx PWU 29-28
Created By: Dustin Ault
Date: 12/21, July 28 2017
Approved: _____ Date: _____

Devon Energy

Eddy County, NM (NAD-83)

Onyx PWU 29-28

62H

OH

Plan: Plan #2

Standard Planning Report

28 July, 2017

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Site: Onyx PWU 29-28
Well: 62H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Onyx PWU 29-28		
Site Position:		Northing:	596,305.26 usft
From:	Map	Easting:	611,703.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 38' 20.701 N
		Longitude:	104° 6' 17.060 W
		Grid Convergence:	0.12 °

Well	62H		
Well Position	+N/-S	-4,036.52 usft	Northing: 592,268.74 usft
	+E/-W	43.16 usft	Easting: 611,746.36 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 37' 40.758 N
		Longitude:	104° 6' 16.657 W
		Ground Level:	3,307.40 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	HDGM	6/28/2017	(°)
			7.43
			Dip Angle (°)
			60.50
			Field Strength (nT)
			48,199

Design	Plan #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			87.88

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	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,393.15	3.93	284.48	4,392.85	3.37	-13.06	1.00	1.00	0.00	284.48	
7,615.05	3.93	284.48	7,607.16	58.61	-226.94	0.00	0.00	0.00	0.00	
8,008.20	0.00	0.00	8,000.00	61.98	-240.00	1.00	-1.00	0.00	180.00	
8,328.31	0.00	0.00	8,320.11	61.98	-240.00	0.00	0.00	0.00	0.00	
9,219.71	89.14	90.00	8,893.00	61.98	324.36	10.00	10.00	0.00	90.00	
11,937.88	89.14	90.00	8,933.80	61.98	3,042.23	0.00	0.00	0.00	0.00	
12,491.82	89.14	84.46	8,942.12	88.74	3,595.24	1.00	0.00	-1.00	-90.04	
14,211.82	89.14	84.46	8,967.94	254.77	5,307.01	0.00	0.00	0.00	0.00	
14,765.09	89.13	89.99	8,976.29	281.52	5,859.36	1.00	0.00	1.00	90.13	
16,528.18	89.13	89.99	9,003.00	281.73	7,622.24	0.00	0.00	0.00	0.00	PBHL (Onyx 62H)

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
 Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Site: Onyx PWU 29-28
 Well: 62H
 Wellbore: OH
 Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 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
SHL (Onyx 62H)									
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
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
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.00									
4,100.00	1.00	284.48	4,100.00	0.22	-0.84	-0.84	1.00	1.00	0.00
4,200.00	2.00	284.48	4,199.96	0.87	-3.38	-3.34	1.00	1.00	0.00
4,300.00	3.00	284.48	4,299.86	1.96	-7.60	-7.53	1.00	1.00	0.00
4,393.15	3.93	284.48	4,392.85	3.37	-13.06	-12.92	1.00	1.00	0.00
Start 3221.89 hold at 4393.15 MD									
4,400.00	3.93	284.48	4,399.68	3.49	-13.51	-13.37	0.00	0.00	0.00
4,500.00	3.93	284.48	4,499.44	5.20	-20.15	-19.94	0.00	0.00	0.00
4,600.00	3.93	284.48	4,599.20	6.92	-26.79	-26.51	0.00	0.00	0.00
4,700.00	3.93	284.48	4,698.97	8.63	-33.43	-33.08	0.00	0.00	0.00
4,800.00	3.93	284.48	4,798.73	10.35	-40.06	-39.65	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Site: Onyx PWU 29-28
Well: 62H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
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)
4,900.00	3.93	284.48	4,898.50	12.06	-46.70	-46.23	0.00	0.00	0.00
5,000.00	3.93	284.48	4,998.26	13.78	-53.34	-52.80	0.00	0.00	0.00
5,100.00	3.93	284.48	5,098.03	15.49	-59.98	-59.37	0.00	0.00	0.00
5,200.00	3.93	284.48	5,197.79	17.20	-66.62	-65.94	0.00	0.00	0.00
5,300.00	3.93	284.48	5,297.56	18.92	-73.26	-72.51	0.00	0.00	0.00
5,400.00	3.93	284.48	5,397.32	20.63	-79.90	-79.08	0.00	0.00	0.00
5,500.00	3.93	284.48	5,497.09	22.35	-86.53	-85.65	0.00	0.00	0.00
5,600.00	3.93	284.48	5,596.85	24.06	-93.17	-92.22	0.00	0.00	0.00
5,700.00	3.93	284.48	5,696.62	25.78	-99.81	-98.79	0.00	0.00	0.00
5,800.00	3.93	284.48	5,796.38	27.49	-106.45	-105.36	0.00	0.00	0.00
5,900.00	3.93	284.48	5,896.15	29.21	-113.09	-111.93	0.00	0.00	0.00
6,000.00	3.93	284.48	5,995.91	30.92	-119.73	-118.50	0.00	0.00	0.00
6,100.00	3.93	284.48	6,095.67	32.63	-126.37	-125.07	0.00	0.00	0.00
6,200.00	3.93	284.48	6,195.44	34.35	-133.01	-131.65	0.00	0.00	0.00
6,300.00	3.93	284.48	6,295.20	36.06	-139.64	-138.22	0.00	0.00	0.00
6,400.00	3.93	284.48	6,394.97	37.78	-146.28	-144.79	0.00	0.00	0.00
6,500.00	3.93	284.48	6,494.73	39.49	-152.92	-151.36	0.00	0.00	0.00
6,600.00	3.93	284.48	6,594.50	41.21	-159.56	-157.93	0.00	0.00	0.00
6,700.00	3.93	284.48	6,694.26	42.92	-166.20	-164.50	0.00	0.00	0.00
6,800.00	3.93	284.48	6,794.03	44.64	-172.84	-171.07	0.00	0.00	0.00
6,900.00	3.93	284.48	6,893.79	46.35	-179.48	-177.64	0.00	0.00	0.00
7,000.00	3.93	284.48	6,993.56	48.06	-186.11	-184.21	0.00	0.00	0.00
7,100.00	3.93	284.48	7,093.32	49.78	-192.75	-190.78	0.00	0.00	0.00
7,200.00	3.93	284.48	7,193.09	51.49	-199.39	-197.35	0.00	0.00	0.00
7,300.00	3.93	284.48	7,292.85	53.21	-206.03	-203.92	0.00	0.00	0.00
7,400.00	3.93	284.48	7,392.62	54.92	-212.67	-210.50	0.00	0.00	0.00
7,500.00	3.93	284.48	7,492.38	56.64	-219.31	-217.07	0.00	0.00	0.00
7,600.00	3.93	284.48	7,592.15	58.35	-225.95	-223.64	0.00	0.00	0.00
7,615.05	3.93	284.48	7,607.16	58.61	-226.94	-224.63	0.00	0.00	0.00
Start Drop -1.00									
7,700.00	3.08	284.48	7,691.95	59.91	-231.98	-229.61	1.00	-1.00	0.00
7,800.00	2.08	284.48	7,791.85	61.03	-236.34	-233.92	1.00	-1.00	0.00
7,900.00	1.08	284.48	7,891.81	61.72	-239.01	-236.57	1.00	-1.00	0.00
8,008.20	0.00	0.00	8,000.00	61.98	-240.00	-237.55	1.00	-1.00	0.00
Start 320.11 hold at 8008.20 MD									
8,100.00	0.00	0.00	8,091.80	61.98	-240.00	-237.55	0.00	0.00	0.00
8,200.00	0.00	0.00	8,191.80	61.98	-240.00	-237.55	0.00	0.00	0.00
8,300.00	0.00	0.00	8,291.80	61.98	-240.00	-237.55	0.00	0.00	0.00
8,328.31	0.00	0.00	8,320.11	61.98	-240.00	-237.55	0.00	0.00	0.00
Start Build 10.00									
8,350.00	2.17	90.00	8,341.80	61.98	-239.59	-237.14	10.00	10.00	0.00
8,400.00	7.17	90.00	8,391.61	61.98	-235.52	-233.07	10.00	10.00	0.00
8,450.00	12.17	90.00	8,440.89	61.98	-227.13	-224.68	10.00	10.00	0.00
8,500.00	17.17	90.00	8,489.24	61.98	-214.47	-212.03	10.00	10.00	0.00
8,550.00	22.17	90.00	8,536.31	61.98	-197.64	-195.22	10.00	10.00	0.00
8,600.00	27.17	90.00	8,581.73	61.98	-176.78	-174.37	10.00	10.00	0.00
8,650.00	32.17	90.00	8,625.16	61.98	-152.04	-149.65	10.00	10.00	0.00
8,700.00	37.17	90.00	8,666.27	61.98	-123.61	-121.23	10.00	10.00	0.00
8,750.00	42.17	90.00	8,704.75	61.98	-91.70	-89.35	10.00	10.00	0.00
8,800.00	47.17	90.00	8,740.30	61.98	-56.56	-54.23	10.00	10.00	0.00
8,850.00	52.17	90.00	8,772.65	61.98	-18.46	-16.15	10.00	10.00	0.00
8,900.00	57.17	90.00	8,801.55	61.98	22.32	24.60	10.00	10.00	0.00
8,950.00	62.17	90.00	8,826.79	61.98	65.46	67.71	10.00	10.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
 Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Site: Onyx PWJ 29-28
 Well: 62H
 Wellbore: OH
 Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 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)
9,000.00	67.17	90.00	8,848.18	61.98	110.64	112.86	10.00	10.00	0.00
9,050.00	72.17	90.00	8,865.55	61.98	157.51	159.69	10.00	10.00	0.00
9,100.00	77.17	90.00	8,878.76	61.98	205.72	207.87	10.00	10.00	0.00
9,150.00	82.17	90.00	8,887.72	61.98	254.89	257.01	10.00	10.00	0.00
9,200.00	87.17	90.00	8,892.37	61.98	304.66	306.74	10.00	10.00	0.00
9,219.71	89.14	90.00	8,893.00	61.98	324.36	326.43	10.00	10.00	0.00
Start 2718.17 hold at 9219.71 MD									
9,300.00	89.14	90.00	8,894.21	61.98	404.64	406.65	0.00	0.00	0.00
9,400.00	89.14	90.00	8,895.71	61.98	504.63	506.57	0.00	0.00	0.00
9,500.00	89.14	90.00	8,897.21	61.98	604.62	606.49	0.00	0.00	0.00
9,600.00	89.14	90.00	8,898.71	61.98	704.61	706.41	0.00	0.00	0.00
9,700.00	89.14	90.00	8,900.21	61.98	804.59	806.34	0.00	0.00	0.00
9,800.00	89.14	90.00	8,901.71	61.98	904.58	906.26	0.00	0.00	0.00
9,900.00	89.14	90.00	8,903.21	61.98	1,004.57	1,006.18	0.00	0.00	0.00
10,000.00	89.14	90.00	8,904.72	61.98	1,104.56	1,106.10	0.00	0.00	0.00
10,100.00	89.14	90.00	8,906.22	61.98	1,204.55	1,206.02	0.00	0.00	0.00
10,200.00	89.14	90.00	8,907.72	61.98	1,304.54	1,305.94	0.00	0.00	0.00
10,300.00	89.14	90.00	8,909.22	61.98	1,404.53	1,405.86	0.00	0.00	0.00
10,400.00	89.14	90.00	8,910.72	61.98	1,504.52	1,505.78	0.00	0.00	0.00
10,500.00	89.14	90.00	8,912.22	61.98	1,604.50	1,605.70	0.00	0.00	0.00
10,600.00	89.14	90.00	8,913.72	61.98	1,704.49	1,705.62	0.00	0.00	0.00
10,700.00	89.14	90.00	8,915.22	61.98	1,804.48	1,805.54	0.00	0.00	0.00
10,800.00	89.14	90.00	8,916.72	61.98	1,904.47	1,905.46	0.00	0.00	0.00
10,900.00	89.14	90.00	8,918.22	61.98	2,004.46	2,005.38	0.00	0.00	0.00
11,000.00	89.14	90.00	8,919.72	61.98	2,104.45	2,105.30	0.00	0.00	0.00
11,100.00	89.14	90.00	8,921.23	61.98	2,204.44	2,205.22	0.00	0.00	0.00
11,200.00	89.14	90.00	8,922.73	61.98	2,304.43	2,305.14	0.00	0.00	0.00
11,300.00	89.14	90.00	8,924.23	61.98	2,404.41	2,405.06	0.00	0.00	0.00
11,400.00	89.14	90.00	8,925.73	61.98	2,504.40	2,504.98	0.00	0.00	0.00
11,500.00	89.14	90.00	8,927.23	61.98	2,604.39	2,604.90	0.00	0.00	0.00
11,600.00	89.14	90.00	8,928.73	61.98	2,704.38	2,704.82	0.00	0.00	0.00
11,700.00	89.14	90.00	8,930.23	61.98	2,804.37	2,804.75	0.00	0.00	0.00
11,800.00	89.14	90.00	8,931.73	61.98	2,904.36	2,904.67	0.00	0.00	0.00
11,900.00	89.14	90.00	8,933.23	61.98	3,004.35	3,004.59	0.00	0.00	0.00
11,937.88	89.14	90.00	8,933.80	61.98	3,042.23	3,042.44	0.00	0.00	0.00
Start DLS 1.00 TFO -90.04									
12,000.00	89.14	89.38	8,934.73	62.32	3,104.33	3,104.52	1.00	0.00	-1.00
12,100.00	89.14	88.38	8,936.24	64.27	3,204.30	3,204.49	1.00	0.00	-1.00
12,200.00	89.14	87.38	8,937.74	67.97	3,304.22	3,304.48	1.00	0.00	-1.00
12,300.00	89.14	86.38	8,939.24	73.42	3,404.06	3,404.45	1.00	0.00	-1.00
12,400.00	89.14	85.38	8,940.74	80.61	3,503.79	3,504.38	1.00	0.00	-1.00
12,491.82	89.14	84.46	8,942.12	88.74	3,595.24	3,596.06	1.00	0.00	-1.00
Start 1720.00 hold at 12491.82 MD									
12,500.00	89.14	84.46	8,942.24	89.53	3,603.38	3,604.23	0.00	0.00	0.00
12,600.00	89.14	84.46	8,943.75	99.18	3,702.90	3,704.04	0.00	0.00	0.00
12,700.00	89.14	84.46	8,945.25	108.83	3,802.42	3,803.85	0.00	0.00	0.00
12,800.00	89.14	84.46	8,946.75	118.48	3,901.94	3,903.66	0.00	0.00	0.00
12,900.00	89.14	84.46	8,948.25	128.14	4,001.47	4,003.47	0.00	0.00	0.00
13,000.00	89.14	84.46	8,949.75	137.79	4,100.99	4,103.28	0.00	0.00	0.00
13,100.00	89.14	84.46	8,951.25	147.44	4,200.51	4,203.09	0.00	0.00	0.00
13,200.00	89.14	84.46	8,952.75	157.10	4,300.03	4,302.90	0.00	0.00	0.00
13,300.00	89.14	84.46	8,954.25	166.75	4,399.55	4,402.71	0.00	0.00	0.00
13,400.00	89.14	84.46	8,955.75	176.40	4,499.07	4,502.52	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
 Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Site: Onyx PWU 29-28
 Well: 62H
 Wellbore: OH
 Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 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)
13,500.00	89.14	84.46	8,957.25	186.06	4,598.60	4,602.33	0.00	0.00	0.00
13,600.00	89.14	84.46	8,958.75	195.71	4,698.12	4,702.14	0.00	0.00	0.00
13,700.00	89.14	84.46	8,960.26	205.36	4,797.64	4,801.95	0.00	0.00	0.00
13,800.00	89.14	84.46	8,961.76	215.01	4,897.16	4,901.76	0.00	0.00	0.00
13,900.00	89.14	84.46	8,963.26	224.67	4,996.68	5,001.57	0.00	0.00	0.00
14,000.00	89.14	84.46	8,964.76	234.32	5,096.20	5,101.38	0.00	0.00	0.00
14,100.00	89.14	84.46	8,966.26	243.97	5,195.73	5,201.19	0.00	0.00	0.00
14,200.00	89.14	84.46	8,967.76	253.63	5,295.25	5,301.00	0.00	0.00	0.00
14,211.82	89.14	84.46	8,967.94	254.77	5,307.01	5,312.80	0.00	0.00	0.00
Start DLS 1.00 TFO 90.13									
14,300.00	89.14	85.34	8,969.26	262.60	5,394.83	5,400.85	1.00	0.00	1.00
14,400.00	89.14	86.34	8,970.77	269.85	5,494.56	5,500.77	1.00	0.00	1.00
14,500.00	89.13	87.34	8,972.28	275.36	5,594.39	5,600.74	1.00	0.00	1.00
14,600.00	89.13	88.34	8,973.79	279.13	5,694.31	5,700.73	1.00	0.00	1.00
14,700.00	89.13	89.34	8,975.30	281.15	5,794.27	5,800.70	1.00	0.00	1.00
14,765.09	89.13	89.99	8,976.29	281.52	5,859.36	5,865.76	1.00	0.00	1.00
Start 1763.09 hold at 14765.09 MD									
14,800.00	89.13	89.99	8,976.82	281.53	5,894.26	5,900.64	0.00	0.00	0.00
14,900.00	89.13	89.99	8,978.33	281.54	5,994.25	6,000.56	0.00	0.00	0.00
15,000.00	89.13	89.99	8,979.85	281.55	6,094.24	6,100.48	0.00	0.00	0.00
15,100.00	89.13	89.99	8,981.36	281.56	6,194.23	6,200.40	0.00	0.00	0.00
15,200.00	89.13	89.99	8,982.88	281.58	6,294.22	6,300.32	0.00	0.00	0.00
15,300.00	89.13	89.99	8,984.39	281.59	6,394.20	6,400.24	0.00	0.00	0.00
15,400.00	89.13	89.99	8,985.91	281.60	6,494.19	6,500.16	0.00	0.00	0.00
15,500.00	89.13	89.99	8,987.42	281.61	6,594.18	6,600.08	0.00	0.00	0.00
15,600.00	89.13	89.99	8,988.94	281.62	6,694.17	6,700.00	0.00	0.00	0.00
15,700.00	89.13	89.99	8,990.45	281.63	6,794.16	6,799.92	0.00	0.00	0.00
15,800.00	89.13	89.99	8,991.97	281.65	6,894.15	6,899.85	0.00	0.00	0.00
15,900.00	89.13	89.99	8,993.48	281.66	6,994.14	6,999.77	0.00	0.00	0.00
16,000.00	89.13	89.99	8,995.00	281.67	7,094.12	7,099.69	0.00	0.00	0.00
16,100.00	89.13	89.99	8,996.51	281.68	7,194.11	7,199.61	0.00	0.00	0.00
16,200.00	89.13	89.99	8,998.03	281.69	7,294.10	7,299.53	0.00	0.00	0.00
16,300.00	89.13	89.99	8,999.54	281.70	7,394.09	7,399.45	0.00	0.00	0.00
16,400.00	89.13	89.99	9,001.06	281.72	7,494.08	7,499.37	0.00	0.00	0.00
16,500.00	89.13	89.99	9,002.57	281.73	7,594.07	7,599.29	0.00	0.00	0.00
16,528.18	89.13	89.99	9,003.00	281.73	7,622.24	7,627.44	0.00	0.00	0.00
TD at 16528.18 - PBHL (Onyx 62H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL (Onyx 62H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	592,268.74	611,746.36	32° 37' 40.758 N	104° 6' 16.657 W
PBHL (Onyx 62H) - plan hits target center - Point	0.00	0.00	9,003.00	281.73	7,622.24	592,550.47	619,368.60	32° 37' 43.374 N	104° 4' 47.517 W

LEAM Drilling Systems LLC

Planning Report

Database: EDM 5000.1 Multi User Db
Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Site: Onyx PWU 29-28
Well: 62H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,000.00	4,000.00	0.00	0.00	Start Build 1.00
4,393.15	4,392.85	3.37	-13.06	Start 3221.89 hold at 4393.15 MD
7,615.05	7,607.16	58.61	-226.94	Start Drop -1.00
8,008.20	8,000.00	61.98	-240.00	Start 320.11 hold at 8008.20 MD
8,328.31	8,320.11	61.98	-240.00	Start Build 10.00
9,219.71	8,893.00	61.98	324.36	Start 2718.17 hold at 9219.71 MD
11,937.88	8,933.80	61.98	3,042.23	Start DLS 1.00 TFO -90.04
12,491.82	8,942.12	88.74	3,595.24	Start 1720.00 hold at 12491.82 MD
14,211.82	8,967.94	254.77	5,307.01	Start DLS 1.00 TFO 90.13
14,765.09	8,976.29	281.52	5,859.36	Start 1763.09 hold at 14765.09 MD
16,528.18	9,003.00	281.73	7,622.24	TD at 16528.18

LEAM Drilling Systems LLC

Anticollision Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 62H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	3307.4' GE + 23.5' KB @ 3330.90usft
Reference Site:	Onyx PWU 29-28	MD Reference:	3307.4' GE + 23.5' KB @ 3330.90usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	62H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Multi User Db
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 9,999.98 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program	Date	7/28/2017
From (usft)	To (usft)	Survey (Wellbore)
0.00	9,219.71	Plan #2 (OH)
9,219.71	16,528.18	Plan #2 (OH)
Tool Name	Description	
LEAM MWD+HDGM	MWD+HDGM	
MWD+IFR1+MS	MWD + IFR1 + Multi-Station Correction	

Summary						
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						
Coral						
1H - OH - OH	13,900.00	11,264.79	1,093.71	1,017.28	14.310 SF	
1H - OH - OH	14,265.07	11,228.99	1,031.85	960.84	14.530 CC, ES	
2H - OH - OH	15,502.81	11,503.78	1,043.85	961.79	12.720 CC, ES	
2H - OH - OH	15,700.00	11,480.51	1,062.08	978.38	12.690 SF	
Onyx Offsets						
Onyx PWU 29 #4H - OH - OH	4,339.85	4,364.97	904.86	887.26	51.416 CC	
Onyx PWU 29 #4H - OH - OH	4,400.00	4,424.71	904.97	887.14	50.758 ES	
Onyx PWU 29 #4H - OH - OH	13,500.00	12,120.00	1,469.38	1,341.06	11.451 SF	
ONYX PWU						
7H - OH - OH (Actual)	6,844.08	6,980.08	568.60	540.83	20.472 CC, ES	
7H - OH - OH (Actual)	6,900.00	6,994.64	571.17	542.90	20.201 SF	
7H - OH - Plan #1 - Draft #4	6,859.08	6,980.41	583.92	557.21	21.859 CC, ES	
7H - OH - Plan #1 - Draft #4	13,500.00	11,892.85	1,986.58	1,885.11	19.576 SF	
Onyx PWU 29-28						
12H - OH - Plan #2	1,907.94	1,908.59	28.82	20.65	3.528 CC, ES	
12H - OH - Plan #2	2,000.00	2,000.43	29.37	20.83	3.437 SF	
Mirage 30 PM State Com 1H (Offset) - OH - OH	5,677.06	5,676.36	1,030.82	1,008.36	45.897 CC	
Mirage 30 PM State Com 1H (Offset) - OH - OH	5,800.00	5,794.97	1,031.12	1,008.12	44.842 ES	
Mirage 30 PM State Com 1H (Offset) - OH - OH	7,400.00	7,311.34	1,056.95	1,027.44	35.814 SF	
Parkway West (Offsets)						
16 - OH - OH	16,528.18	9,000.50	682.38	602.11	8.501 CC, ES, SF	
Unit 28 3 - OH - OH	15,201.64	8,976.65	211.63	122.84	2.384 CC, ES, SF	

Offset Design													
Coral - 1H - OH - OH													
Survey Program: 44-NS-GYRO-MS, 7331-MWD-ISCWSA													
Reference Offset Semi Major Axis													
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)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	126.89	126.87	0.00	0.24	55.56	3,680.28	5,367.31	6,508.85				
100.00	100.00	225.15	225.10	0.09	0.50	55.55	3,680.37	5,365.23	6,507.16	6,506.55	0.61	N/A	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Coral - 1H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 44-NS-GYRO-MS, 7331-MWD-ISCWSA												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	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)					
200.00	200.00	326.72	326.65	0.31	0.77	55.54	3,680.31	5,363.15	6,505.44	6,504.36	1.09	5,988.367	
300.00	300.00	403.89	403.81	0.54	0.97	55.53	3,680.28	5,361.72	6,503.88	6,502.37	1.51	4,306.720	
400.00	400.00	481.13	481.05	0.76	1.18	55.53	3,680.39	5,360.51	6,502.68	6,500.74	1.94	3,358.015	
500.00	500.00	562.92	562.82	0.99	1.39	55.52	3,680.62	5,359.49	6,501.81	6,499.43	2.37	2,739.497	
600.00	600.00	649.23	649.13	1.21	1.61	55.51	3,681.01	5,358.55	6,501.16	6,498.34	2.82	2,306.849	
700.00	700.00	729.84	729.74	1.43	1.81	55.51	3,681.49	5,357.80	6,500.74	6,497.50	3.24	2,006.953	
745.72	745.72	759.93	759.82	1.54	1.87	55.50	3,681.76	5,357.57	6,500.68	6,497.28	3.41	1,907.556	
800.00	800.00	805.92	805.81	1.66	1.97	55.50	3,682.30	5,357.30	6,500.77	6,497.14	3.63	1,790.454	
900.00	900.00	855.99	855.88	1.88	2.05	55.49	3,683.03	5,357.18	6,501.35	6,497.41	3.94	1,651.717	
1,000.00	1,000.00	918.79	918.66	2.11	2.15	55.49	3,684.07	5,357.40	6,502.55	6,498.30	4.25	1,528.974	
1,100.00	1,100.00	996.40	996.26	2.33	2.23	55.48	3,685.26	5,358.16	6,504.22	6,499.66	4.56	1,425.479	
1,200.00	1,200.00	1,083.15	1,083.00	2.56	2.30	55.48	3,686.21	5,359.56	6,506.17	6,501.31	4.86	1,340.061	
1,300.00	1,300.00	1,190.07	1,189.89	2.78	2.40	55.48	3,687.31	5,361.36	6,508.14	6,502.96	5.19	1,254.567	
1,400.00	1,400.00	1,322.13	1,321.93	3.01	2.64	55.47	3,689.41	5,362.52	6,509.75	6,504.10	5.65	1,152.663	
1,500.00	1,500.00	1,432.95	1,432.73	3.23	2.88	55.46	3,691.31	5,363.00	6,511.08	6,504.97	6.11	1,065.628	
1,600.00	1,600.00	1,549.18	1,548.95	3.46	3.15	55.45	3,693.31	5,363.23	6,512.22	6,505.62	6.60	986.020	
1,700.00	1,700.00	1,667.24	1,666.99	3.68	3.44	55.43	3,695.19	5,363.17	6,513.08	6,505.97	7.12	914.929	
1,800.00	1,800.00	1,807.88	1,807.61	3.91	3.80	55.41	3,697.26	5,362.47	6,513.51	6,505.81	7.70	845.689	
1,870.14	1,870.14	1,884.52	1,884.24	4.06	3.99	55.40	3,698.27	5,361.74	6,513.48	6,505.43	8.06	808.471	
1,900.00	1,900.00	1,908.32	1,908.04	4.13	4.05	55.40	3,698.59	5,361.54	6,513.50	6,505.31	8.18	795.792	
2,000.00	2,000.00	1,990.07	1,989.78	4.36	4.26	55.39	3,699.68	5,361.02	6,513.74	6,505.12	8.62	755.621	
2,100.00	2,100.00	2,078.09	2,077.80	4.58	4.49	55.38	3,700.84	5,360.74	6,514.22	6,505.15	9.07	718.060	
2,200.00	2,200.00	2,173.94	2,173.63	4.81	4.74	55.37	3,702.27	5,360.44	6,514.81	6,505.27	9.54	682.623	
2,300.00	2,300.00	2,268.73	2,268.41	5.03	4.98	55.36	3,703.87	5,360.09	6,515.47	6,505.45	10.01	650.655	
2,400.00	2,400.00	2,360.93	2,360.59	5.26	5.22	55.34	3,705.51	5,359.81	6,516.23	6,505.75	10.48	621.979	
2,500.00	2,500.00	2,461.51	2,461.16	5.48	5.48	55.33	3,707.34	5,359.60	6,517.09	6,506.13	10.96	594.572	
2,600.00	2,600.00	2,580.10	2,579.72	5.71	5.79	55.31	3,709.35	5,359.17	6,517.76	6,506.26	11.49	567.031	
2,700.00	2,700.00	2,713.15	2,712.76	5.93	6.14	55.29	3,711.17	5,358.39	6,518.06	6,506.00	12.07	540.172	
2,800.00	2,800.00	2,825.92	2,825.52	6.15	6.42	55.28	3,712.08	5,357.60	6,517.94	6,505.36	12.58	518.195	
2,891.76	2,891.76	2,896.22	2,895.82	6.36	6.63	55.28	3,712.62	5,357.14	6,517.86	6,504.87	12.99	501.789	
2,900.00	2,900.00	2,913.59	2,913.19	6.38	6.65	55.28	3,712.67	5,357.11	6,517.86	6,504.84	13.03	500.334	
3,000.00	3,000.00	3,005.17	3,004.77	6.60	6.89	55.27	3,713.32	5,356.77	6,517.96	6,504.47	13.49	483.129	
3,100.00	3,100.00	3,126.90	3,126.49	6.83	7.20	55.26	3,714.25	5,356.11	6,517.95	6,503.92	14.03	464.563	
3,200.00	3,200.00	3,240.84	3,240.42	7.05	7.49	55.25	3,715.08	5,355.05	6,517.60	6,503.06	14.54	448.285	
3,300.00	3,300.00	3,340.18	3,339.76	7.28	7.73	55.24	3,715.77	5,354.09	6,517.20	6,502.19	15.01	434.229	
3,400.00	3,400.00	3,443.34	3,442.92	7.50	7.98	55.23	3,716.44	5,353.11	6,516.79	6,501.30	15.49	420.772	
3,500.00	3,500.00	3,548.67	3,548.23	7.73	8.24	55.22	3,717.12	5,352.02	6,516.31	6,500.34	15.97	408.025	
3,600.00	3,600.00	3,650.89	3,650.44	7.95	8.49	55.21	3,717.81	5,350.86	6,515.76	6,499.32	16.45	396.193	
3,700.00	3,700.00	3,751.02	3,750.56	8.18	8.74	55.20	3,718.65	5,349.59	6,515.20	6,498.28	16.92	385.056	
3,800.00	3,800.00	3,865.53	3,865.06	8.40	9.03	55.18	3,719.61	5,348.00	6,514.54	6,497.11	17.43	373.807	
3,900.00	3,900.00	3,973.39	3,972.90	8.63	9.28	55.17	3,720.30	5,346.36	6,513.66	6,495.75	17.91	363.673	
4,000.00	4,000.00	4,062.63	4,062.14	8.85	9.50	55.16	3,720.85	5,345.09	6,512.84	6,494.49	18.35	354.910	
4,057.03	4,057.03	4,113.89	4,113.39	8.97	9.63	130.67	3,721.19	5,344.42	6,512.63	6,494.03	18.60	350.161	
4,100.00	4,100.00	4,153.73	4,153.23	9.07	9.72	130.67	3,721.45	5,343.94	6,512.74	6,493.96	18.79	346.622	
4,200.00	4,199.96	4,251.81	4,251.30	9.27	9.97	130.67	3,722.00	5,342.86	6,513.86	6,494.63	19.24	338.638	
4,300.00	4,299.86	11,388.64	7,957.30	9.48	67.32	165.44	56.04	5,377.11	6,501.69	6,436.01	65.68	98.987	
4,393.15	4,392.85	11,389.62	7,957.34	9.67	67.34	165.58	55.07	5,377.09	6,454.58	6,388.29	66.30	97.359	
4,400.00	4,399.68	11,389.68	7,957.34	9.69	67.34	165.58	55.00	5,377.09	6,451.21	6,384.87	66.34	97.244	
4,500.00	4,499.44	11,390.66	7,957.38	9.90	67.35	165.59	54.02	5,377.08	6,402.53	6,335.52	67.01	95.546	
4,600.00	4,599.20	11,391.67	7,957.41	10.11	67.37	165.60	53.02	5,377.06	6,355.06	6,287.38	67.68	93.897	
4,700.00	4,698.97	11,392.70	7,957.45	10.33	67.39	165.61	51.98	5,377.05	6,308.81	6,240.39	68.42	92.205	
4,800.00	4,798.73	11,393.76	7,957.49	10.55	67.40	165.62	50.92	5,377.03	6,263.82	6,194.65	69.17	90.553	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Coral - 1H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 44-NS-GYRO-MS, 7331-MWD-ISCWSA														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			
4,900.00	4,898.50	11,394.85	7,957.53	10.76	67.42	165.64	49.84	5,377.02	6,220.11	6,150.19	69.93	88.953			
5,000.00	4,998.26	11,395.97	7,957.57	10.98	67.44	165.65	48.72	5,377.00	6,177.71	6,107.03	70.68	87.406			
5,100.00	5,098.03	11,397.12	7,957.62	11.20	67.46	165.66	47.57	5,376.99	6,136.65	6,065.22	71.43	85.912			
5,200.00	5,197.79	11,398.31	7,957.66	11.43	67.48	165.67	46.38	5,376.97	6,096.95	6,024.77	72.18	84.469			
5,300.00	5,297.56	11,399.53	7,957.71	11.65	67.50	165.68	45.16	5,376.95	6,058.64	5,985.71	72.93	83.079			
5,400.00	5,397.32	11,400.78	7,957.76	11.87	67.52	165.70	43.91	5,376.93	6,021.74	5,948.07	73.67	81.739			
5,500.00	5,497.09	11,402.07	7,957.81	12.10	67.54	165.71	42.62	5,376.92	5,986.29	5,911.88	74.41	80.451			
5,600.00	5,596.85	11,403.40	7,957.87	12.33	67.56	165.72	41.29	5,376.90	5,952.31	5,877.16	75.14	79.213			
5,700.00	5,696.62	11,404.78	7,957.92	12.55	67.59	165.74	39.92	5,376.88	5,919.82	5,843.95	75.87	78.026			
5,800.00	5,796.38	11,406.19	7,957.98	12.78	67.61	165.75	38.51	5,376.86	5,888.85	5,812.26	76.59	76.888			
5,900.00	5,896.15	11,407.65	7,958.04	13.01	67.63	165.77	37.05	5,376.84	5,859.42	5,782.12	77.30	75.800			
6,000.00	5,995.91	11,409.16	7,958.10	13.24	67.66	165.78	35.54	5,376.82	5,831.56	5,753.56	78.00	74.761			
6,100.00	6,095.67	11,410.71	7,958.17	13.47	67.69	165.80	33.99	5,376.79	5,805.28	5,726.59	78.69	73.770			
6,200.00	6,195.44	11,430.00	7,959.03	13.70	68.01	165.99	14.72	5,376.53	5,780.66	5,701.02	79.65	72.579			
6,300.00	6,295.20	11,430.00	7,959.03	13.93	68.01	165.99	14.72	5,376.53	5,757.62	5,677.33	80.29	71.711			
6,400.00	6,394.97	11,430.00	7,959.03	14.17	68.01	165.99	14.72	5,376.53	5,736.23	5,655.31	80.92	70.888			
6,500.00	6,494.73	11,430.00	7,959.03	14.40	68.01	165.99	14.72	5,376.53	5,716.51	5,634.98	81.53	70.113			
6,600.00	6,594.50	11,430.00	7,959.03	14.63	68.01	165.99	14.72	5,376.53	5,696.48	5,616.35	82.13	69.383			
6,700.00	6,694.26	11,430.00	7,959.03	14.87	68.01	165.99	14.72	5,376.53	5,682.15	5,599.44	82.71	68.698			
6,800.00	6,794.03	11,430.00	7,959.03	15.10	68.01	165.99	14.72	5,376.53	5,667.53	5,584.26	83.27	68.058			
6,900.00	6,893.79	11,430.00	7,959.03	15.34	68.01	165.99	14.72	5,376.53	5,654.65	5,570.83	83.82	67.463			
7,000.00	6,993.56	11,430.00	7,959.03	15.57	68.01	165.99	14.72	5,376.53	5,643.51	5,559.17	84.34	66.911			
7,100.00	7,093.32	11,430.00	7,959.03	15.81	68.01	165.99	14.72	5,376.53	5,634.13	5,549.28	84.85	66.403			
7,200.00	7,193.09	11,430.00	7,959.03	16.04	68.01	165.99	14.72	5,376.53	5,626.50	5,541.17	85.33	65.937			
7,300.00	7,292.85	11,430.00	7,959.03	16.28	68.01	165.99	14.72	5,376.53	5,620.65	5,534.85	85.79	65.513			
7,400.00	7,392.62	11,430.00	7,959.03	16.52	68.01	165.99	14.72	5,376.53	5,616.57	5,530.33	86.23	65.132			
7,500.00	7,492.38	11,430.00	7,959.03	16.76	68.01	165.99	14.72	5,376.53	5,614.26	5,527.61	86.65	64.791			
7,579.28	7,571.47	11,430.00	7,959.03	16.94	68.01	165.99	14.72	5,376.53	5,613.70	5,526.74	86.97	64.550			
7,600.00	7,592.15	11,430.00	7,959.03	16.99	68.01	165.99	14.72	5,376.53	5,613.74	5,526.70	87.05	64.491			
7,615.05	7,607.16	11,430.00	7,959.03	17.03	68.01	165.99	14.72	5,376.53	5,613.82	5,526.71	87.10	64.449			
7,700.00	7,691.95	11,430.00	7,959.03	17.21	68.01	166.00	14.72	5,376.53	5,614.39	5,526.99	87.40	64.235			
7,800.00	7,791.85	11,430.00	7,959.03	17.40	68.01	166.00	14.72	5,376.53	5,615.15	5,527.43	87.72	64.014			
7,900.00	7,891.81	11,430.00	7,959.03	17.58	68.01	166.00	14.72	5,376.53	5,615.99	5,527.98	88.01	63.813			
8,008.20	8,000.00	11,430.00	7,959.03	17.78	68.01	90.48	14.72	5,376.53	5,617.00	5,528.71	88.29	63.618			
8,100.00	8,091.80	11,430.00	7,959.03	17.96	68.01	90.48	14.72	5,376.53	5,618.65	5,530.12	88.53	63.466			
8,200.00	8,191.80	11,430.00	7,959.03	18.17	68.01	90.48	14.72	5,376.53	5,622.15	5,533.37	88.78	63.325			
8,300.00	8,291.80	11,430.00	7,959.03	18.39	68.01	90.48	14.72	5,376.53	5,627.43	5,538.42	89.01	63.220			
8,328.31	8,320.11	11,430.00	7,959.03	18.45	68.01	90.48	14.72	5,376.53	5,629.25	5,540.17	89.07	63.198			
8,350.00	8,341.80	11,430.00	7,959.03	18.49	68.01	0.48	14.72	5,376.53	5,630.32	5,541.21	89.12	63.180			
8,400.00	8,391.61	11,430.00	7,959.03	18.58	68.01	0.48	14.72	5,376.53	5,630.00	5,540.80	89.20	63.118			
8,450.00	8,440.89	11,455.03	7,960.14	18.65	68.42	0.74	-10.28	5,376.25	5,625.65	5,535.97	89.68	62.733			
8,500.00	8,489.24	11,455.94	7,960.17	18.72	68.44	0.76	-11.19	5,376.24	5,617.51	5,527.75	89.75	62.588			
8,550.00	8,536.31	11,456.79	7,960.21	18.78	68.45	0.79	-12.04	5,376.23	5,605.52	5,515.70	89.82	62.406			
8,600.00	8,581.73	11,457.59	7,960.24	18.84	68.46	0.82	-12.84	5,376.22	5,589.76	5,499.88	89.88	62.191			
8,650.00	8,625.16	11,458.33	7,960.27	18.91	68.48	0.86	-13.58	5,376.22	5,570.31	5,480.38	89.93	61.942			
8,700.00	8,666.27	11,459.01	7,960.30	18.98	68.49	0.91	-14.26	5,376.21	5,547.28	5,457.32	89.97	61.660			
8,750.00	8,704.75	11,459.62	7,960.32	19.07	68.50	0.97	-14.86	5,376.21	5,520.80	5,430.81	89.99	61.346			
8,800.00	8,740.30	11,460.15	7,960.34	19.20	68.51	1.04	-15.40	5,376.20	5,491.03	5,401.02	90.01	61.002			
8,850.00	8,772.65	11,460.62	7,960.36	19.36	68.51	1.13	-15.86	5,376.20	5,458.14	5,368.11	90.03	60.629			
8,900.00	8,801.55	11,461.00	7,960.38	19.57	68.52	1.24	-16.25	5,376.20	5,422.32	5,332.29	90.03	60.227			
8,950.00	8,826.79	11,461.31	7,960.39	19.85	68.53	1.38	-16.56	5,376.19	5,383.80	5,293.77	90.03	59.800			
9,000.00	8,848.18	11,461.54	7,960.40	20.18	68.53	1.57	-16.79	5,376.19	5,342.81	5,252.78	90.02	59.349			

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Coral - 1H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 44-NS-GYRO-MS, 7331-MWD-ISCWSA													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	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
9,050.00	8,865.55	11,461.69	7,960.40	20.59	68.53	1.83	-16.93	5,376.19	5,299.61	5,209.59	90.01	58.876		
9,100.00	8,878.76	11,461.75	7,960.41	21.06	68.53	2.20	-16.99	5,376.19	5,254.47	5,164.47	90.00	58.383		
9,150.00	8,887.72	11,461.73	7,960.41	21.60	68.53	2.77	-16.97	5,376.19	5,207.70	5,117.72	89.99	57.873		
9,200.00	8,892.37	11,461.62	7,960.40	22.20	68.53	3.77	-16.87	5,376.19	5,159.62	5,069.65	89.97	57.349		
9,219.71	8,893.00	11,461.56	7,960.40	22.45	68.53	4.41	-16.80	5,376.19	5,140.38	5,050.41	89.96	57.138		
9,300.00	8,894.21	11,461.26	7,960.39	23.72	68.52	4.39	-16.51	5,376.19	5,061.72	4,966.42	95.30	53.113		
9,400.00	8,895.71	11,460.89	7,960.37	23.80	68.52	4.37	-16.14	5,376.20	4,963.84	4,868.50	95.34	52.064		
9,500.00	8,897.21	11,460.51	7,960.36	23.88	68.51	4.35	-15.76	5,376.20	4,866.04	4,770.66	95.38	51.017		
9,600.00	8,898.71	11,460.13	7,960.34	23.96	68.51	4.33	-15.37	5,376.20	4,768.33	4,672.91	95.42	49.972		
9,700.00	8,900.21	11,459.74	7,960.33	24.04	68.50	4.30	-14.98	5,376.21	4,670.72	4,575.26	95.46	48.930		
9,800.00	8,901.71	11,459.34	7,960.31	24.14	68.49	4.28	-14.59	5,376.21	4,573.21	4,477.72	95.49	47.890		
9,900.00	8,903.21	11,458.94	7,960.29	24.26	68.49	4.26	-14.18	5,376.21	4,475.82	4,380.29	95.53	46.852		
10,000.00	8,904.72	11,458.53	7,960.28	24.50	68.48	4.24	-13.77	5,376.22	4,378.53	4,282.97	95.56	45.818		
10,100.00	8,906.22	11,458.11	7,960.26	24.88	68.47	4.21	-13.36	5,376.22	4,281.38	4,185.78	95.60	44.786		
10,200.00	8,907.72	11,457.68	7,960.24	25.32	68.47	4.19	-12.93	5,376.22	4,184.36	4,088.73	95.63	43.758		
10,300.00	8,909.22	11,457.25	7,960.23	25.80	68.46	4.17	-12.50	5,376.23	4,087.48	3,991.83	95.65	42.732		
10,400.00	8,910.72	11,456.81	7,960.21	26.33	68.45	4.14	-12.06	5,376.23	3,990.76	3,895.08	95.68	41.710		
10,500.00	8,912.22	11,456.37	7,960.19	26.89	68.44	4.12	-11.62	5,376.24	3,894.20	3,798.50	95.70	40.692		
10,600.00	8,913.72	11,455.91	7,960.17	27.49	68.44	4.09	-11.16	5,376.24	3,797.82	3,702.10	95.72	39.677		
10,700.00	8,915.22	11,455.45	7,960.15	28.12	68.43	4.07	-10.70	5,376.24	3,701.63	3,605.89	95.73	38.666		
10,800.00	8,916.72	11,454.98	7,960.13	28.77	68.42	4.04	-10.23	5,376.25	3,605.65	3,509.90	95.74	37.659		
10,900.00	8,918.22	11,454.50	7,960.11	29.46	68.41	4.01	-9.75	5,376.25	3,509.89	3,414.14	95.75	36.657		
11,000.00	8,919.72	11,454.01	7,960.09	30.17	68.40	3.98	-9.26	5,376.26	3,414.37	3,318.63	95.75	35.660		
11,100.00	8,921.23	11,453.51	7,960.07	30.91	68.40	3.96	-8.76	5,376.26	3,319.13	3,223.38	95.74	34.667		
11,200.00	8,922.73	11,453.01	7,960.05	31.67	68.39	3.93	-8.26	5,376.27	3,224.16	3,128.43	95.73	33.680		
11,300.00	8,924.23	11,452.49	7,960.03	32.45	68.38	3.90	-7.74	5,376.27	3,129.51	3,033.81	95.71	32.699		
11,400.00	8,925.73	11,451.96	7,960.01	33.25	68.37	3.87	-7.22	5,376.28	3,035.21	2,939.53	95.68	31.724		
11,500.00	8,927.23	11,451.43	7,959.99	34.06	68.36	3.84	-6.68	5,376.28	2,941.28	2,845.64	95.64	30.755		
11,600.00	8,928.73	11,450.88	7,959.96	34.90	68.35	3.81	-6.13	5,376.29	2,847.76	2,752.18	95.58	29.794		
11,700.00	8,930.23	11,450.32	7,959.94	35.75	68.34	3.78	-5.58	5,376.29	2,754.70	2,659.19	95.52	28.840		
11,800.00	8,931.73	11,449.75	7,959.91	36.61	68.33	3.75	-5.01	5,376.30	2,662.14	2,566.71	95.43	27.895		
11,900.00	8,933.23	11,449.17	7,959.89	37.49	68.32	3.71	-4.43	5,376.30	2,570.14	2,474.81	95.33	26.960		
11,937.88	8,933.80	11,448.95	7,959.88	37.82	68.32	3.70	-4.21	5,376.31	2,535.45	2,440.16	95.29	26.608		
12,000.00	8,934.73	11,448.37	7,959.86	38.38	68.31	5.06	-3.63	5,376.31	2,478.77	2,383.56	95.21	26.035		
12,100.00	8,936.24	11,430.00	7,959.03	39.28	68.01	6.19	14.72	5,376.53	2,388.25	2,293.43	94.81	25.189		
12,200.00	8,937.74	11,430.00	7,959.03	40.19	68.01	8.22	14.72	5,376.53	2,298.47	2,203.83	94.64	24.286		
12,300.00	8,939.24	11,430.00	7,959.03	41.11	68.01	10.14	14.72	5,376.53	2,209.69	2,115.26	94.44	23.399		
12,400.00	8,940.74	11,430.00	7,959.03	42.03	68.01	11.95	14.72	5,376.53	2,122.06	2,027.87	94.19	22.530		
12,491.82	8,942.12	11,426.30	7,958.85	42.89	67.94	13.30	18.42	5,376.58	2,042.76	1,948.89	93.87	21.762		
12,500.00	8,942.24	11,425.15	7,958.80	42.96	67.93	13.24	19.57	5,376.60	2,035.75	1,941.93	93.83	21.697		
12,600.00	8,943.75	11,410.98	7,958.18	43.90	67.69	12.48	33.72	5,376.79	1,950.78	1,857.48	93.30	20.910		
12,700.00	8,945.25	11,396.71	7,957.60	44.84	67.45	11.72	47.98	5,376.99	1,867.21	1,774.50	92.71	20.141		
12,800.00	8,946.75	11,382.33	7,957.08	45.80	67.22	10.94	62.35	5,377.20	1,785.24	1,693.18	92.05	19.393		
12,900.00	8,948.25	11,367.84	7,956.61	46.76	66.97	10.16	76.83	5,377.41	1,705.10	1,613.78	91.32	18.671		
13,000.00	8,949.75	11,353.24	7,956.19	47.72	66.73	9.37	91.42	5,377.63	1,627.07	1,536.57	90.50	17.979		
13,100.00	8,951.25	11,338.53	7,955.83	48.70	66.49	8.57	106.13	5,377.86	1,551.45	1,461.89	89.56	17.322		
13,200.00	8,952.75	11,336.00	7,955.77	49.67	66.45	8.43	108.65	5,377.90	1,478.66	1,390.02	88.63	16.683		
13,300.00	8,954.25	11,319.12	7,955.37	50.66	66.17	7.51	125.53	5,378.16	1,409.08	1,321.69	87.39	16.123		
13,400.00	8,955.75	11,309.95	7,955.12	51.65	66.02	7.01	134.69	5,378.30	1,343.30	1,257.24	86.06	15.609		
13,500.00	8,957.25	11,300.83	7,954.85	52.64	65.86	6.51	143.80	5,378.44	1,281.88	1,197.35	84.52	15.166		
13,600.00	8,958.75	11,291.76	7,954.57	53.64	65.71	6.01	152.87	5,378.57	1,225.46	1,142.69	82.77	14.806		
13,700.00	8,960.26	11,282.73	7,954.27	54.64	65.56	5.52	161.90	5,378.70	1,174.78	1,093.97	80.81	14.538		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Coral - 1H - OH - OH														Offset Site Error: 0.00 usft	
Survey Program: 44-NS-GYRO-MS, 7331-MWD-ISCWSA														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			
13,800.00	8,961.76	11,273.74	7,953.95	55.64	65.42	5.02	170.88	5,378.83	1,130.59	1,051.93	78.66	14.373			
13,900.00	8,963.26	11,264.79	7,953.62	56.65	65.27	4.53	179.82	5,378.95	1,093.71	1,017.28	76.43	14.310	SF		
14,000.00	8,964.76	11,255.89	7,953.26	57.67	65.12	4.04	188.71	5,379.08	1,064.87	990.60	74.27	14.338			
14,100.00	8,966.26	11,241.00	7,952.63	58.69	64.87	3.22	203.59	5,379.28	1,044.77	972.36	72.41	14.428			
14,200.00	8,967.76	11,237.02	7,952.46	59.71	64.81	3.00	207.57	5,379.33	1,033.86	962.58	71.28	14.503			
14,211.82	8,967.94	11,235.52	7,952.39	59.83	64.79	2.91	209.07	5,379.35	1,033.20	961.99	71.20	14.511			
14,265.07	8,968.74	11,228.99	7,952.11	60.37	64.68	2.53	215.59	5,379.44	1,031.85	960.84	71.02	14.530	CC, ES		
14,300.00	8,969.26	11,224.98	7,951.94	60.73	64.62	2.31	219.60	5,379.50	1,032.43	961.38	71.05	14.530			
14,400.00	8,970.77	11,214.69	7,951.52	61.76	64.45	1.81	229.87	5,379.66	1,040.49	968.63	71.85	14.480			
14,500.00	8,972.28	11,206.24	7,951.18	62.80	64.31	1.50	238.32	5,379.80	1,057.85	984.36	73.50	14.394			
14,600.00	8,973.79	11,199.69	7,950.93	63.84	64.21	1.40	244.85	5,379.91	1,084.12	1,008.47	75.64	14.332			
14,700.00	8,975.30	11,195.13	7,950.75	64.88	64.13	1.50	249.41	5,379.99	1,118.67	1,040.69	77.98	14.345			
14,765.09	8,976.29	11,193.26	7,950.68	65.56	64.10	1.67	251.28	5,380.02	1,145.28	1,065.78	79.50	14.406			
14,800.00	8,976.82	11,192.49	7,950.66	65.92	64.09	1.63	252.05	5,380.04	1,160.79	1,080.50	80.29	14.458			
14,900.00	8,978.33	11,190.25	7,950.57	66.97	64.05	1.51	254.29	5,380.08	1,209.72	1,127.30	82.42	14.678			
15,000.00	8,979.85	11,187.96	7,950.49	68.02	64.02	1.38	256.58	5,380.12	1,264.67	1,180.36	84.31	15.001			
15,100.00	8,981.36	11,185.60	7,950.40	69.08	63.98	1.25	258.94	5,380.16	1,324.90	1,238.95	85.94	15.416			
15,200.00	8,982.88	11,183.17	7,950.31	70.13	63.94	1.12	261.36	5,380.21	1,389.72	1,302.37	87.34	15.911			
15,300.00	8,984.39	11,180.68	7,950.23	71.19	63.90	0.98	263.85	5,380.26	1,458.51	1,369.99	88.53	16.475			
15,400.00	8,985.91	11,178.12	7,950.13	72.25	63.86	0.84	266.41	5,380.31	1,530.75	1,441.23	89.53	17.098			
15,500.00	8,987.42	11,175.49	7,950.04	73.31	63.82	0.69	269.04	5,380.36	1,605.97	1,515.60	90.37	17.772			
15,600.00	8,988.94	11,172.78	7,949.95	74.37	63.77	0.54	271.75	5,380.41	1,683.76	1,592.68	91.07	18.488			
15,700.00	8,990.45	11,169.99	7,949.85	75.44	63.73	0.38	274.53	5,380.47	1,763.79	1,672.12	91.67	19.240			
15,800.00	8,991.97	11,167.12	7,949.76	76.50	63.68	0.23	277.40	5,380.53	1,845.76	1,753.58	92.18	20.023			
15,900.00	8,993.48	11,164.16	7,949.66	77.57	63.63	0.06	280.36	5,380.59	1,929.44	1,836.82	92.62	20.833			
16,000.00	8,995.00	11,161.12	7,949.56	78.64	63.58	-0.11	283.40	5,380.66	2,014.60	1,921.61	92.99	21.665			
16,100.00	8,996.51	11,157.98	7,949.45	79.71	63.53	-0.28	286.54	5,380.72	2,101.06	2,007.75	93.31	22.518			
16,200.00	8,998.03	11,154.74	7,949.35	80.78	63.48	-0.46	289.78	5,380.79	2,188.68	2,095.01	93.66	23.368			
16,300.00	8,999.54	11,151.39	7,949.24	81.85	63.43	-0.65	293.12	5,380.87	2,277.31	2,183.30	94.01	24.224			
16,400.00	9,001.06	11,147.94	7,949.13	82.93	63.37	-0.84	296.56	5,380.95	2,366.84	2,272.52	94.32	25.093			
16,500.00	9,002.57	11,145.00	7,949.04	84.00	63.32	-1.00	299.50	5,381.01	2,457.18	2,362.57	94.61	25.971			
16,528.18	9,003.00	11,144.39	7,949.03	84.30	63.31	-1.03	300.12	5,381.03	2,482.77	2,388.08	94.69	26.220			

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Coral - 2H - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 7313-MWD-ISCWSA												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Hightide Toothface [°]	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	0.00	0.00	0.00	0.00	57.88	3,953.67	6,298.75	7,436.79				
100.00	100.00	187.67	187.67	0.09	0.33	57.88	3,952.89	6,297.33	7,435.72	7,435.28	0.43	N/A	
200.00	200.00	305.65	305.64	0.31	0.64	57.88	3,951.93	6,296.08	7,434.40	7,433.44	0.96	7,749.121	
300.00	300.00	445.06	445.02	0.54	1.01	57.89	3,950.31	6,294.14	7,432.57	7,431.02	1.55	4,785.131	
400.00	400.00	605.42	605.34	0.76	1.44	57.89	3,947.79	6,291.41	7,430.36	7,428.16	2.20	3,371.212	
500.00	500.00	1,841.47	1,831.79	0.99	4.82	57.71	3,900.21	6,171.86	7,421.92	7,416.04	5.88	1,262.375	
600.00	600.00	1,900.00	1,889.40	1.21	4.99	57.69	3,896.65	6,162.19	7,404.49	7,398.29	6.21	1,192.936	
700.00	700.00	1,922.04	1,911.13	1.43	5.05	57.69	3,895.30	6,158.75	7,387.66	7,381.21	6.45	1,145.790	
800.00	800.00	2,000.00	1,987.99	1.66	5.28	57.66	3,890.90	6,146.45	7,371.31	7,364.45	6.86	1,075.098	
900.00	900.00	2,061.15	2,048.30	1.88	5.45	57.65	3,887.74	6,136.90	7,355.36	7,348.13	7.22	1,018.066	
1,000.00	1,000.00	2,100.00	2,086.66	2.11	5.57	57.63	3,885.84	6,131.01	7,340.03	7,332.50	7.54	973.763	
1,100.00	1,100.00	2,168.91	2,154.74	2.33	5.76	57.61	3,882.85	6,120.80	7,325.25	7,317.32	7.94	923.085	
1,200.00	1,200.00	2,200.00	2,185.48	2.56	5.85	57.60	3,881.72	6,116.27	7,311.19	7,302.95	8.23	887.837	
1,300.00	1,300.00	2,257.56	2,242.45	2.78	6.01	57.58	3,879.82	6,108.28	7,297.79	7,289.18	8.61	847.921	
1,400.00	1,400.00	2,300.00	2,284.52	3.01	6.13	57.56	3,878.48	6,102.83	7,285.23	7,276.29	8.94	814.895	
1,500.00	1,500.00	2,365.57	2,349.56	3.23	6.32	57.54	3,876.55	6,094.80	7,273.30	7,263.97	9.34	779.078	
1,600.00	1,600.00	2,445.27	2,428.67	3.46	6.54	57.52	3,874.41	6,085.27	7,261.75	7,251.99	9.77	743.313	
1,700.00	1,700.00	2,543.25	2,525.92	3.68	6.81	57.48	3,871.93	6,073.61	7,250.34	7,240.09	10.25	707.235	
1,800.00	1,800.00	2,635.13	2,617.11	3.91	7.07	57.45	3,869.63	6,062.61	7,238.90	7,228.18	10.72	675.390	
1,900.00	1,900.00	2,710.31	2,691.73	4.13	7.28	57.42	3,868.13	6,053.63	7,227.75	7,216.61	11.14	648.757	
2,000.00	2,000.00	2,800.00	2,780.80	4.36	7.52	57.39	3,866.27	6,043.25	7,216.86	7,205.26	11.60	622.035	
2,100.00	2,100.00	2,900.00	2,880.13	4.58	7.80	57.36	3,863.84	6,031.95	7,206.03	7,193.93	12.09	595.962	
2,200.00	2,200.00	2,982.33	2,961.91	4.81	8.03	57.33	3,861.89	6,022.69	7,195.27	7,182.73	12.53	574.024	
2,300.00	2,300.00	3,065.26	3,044.31	5.03	8.26	57.30	3,860.09	6,013.49	7,184.75	7,171.78	12.98	553.530	
2,400.00	2,400.00	3,188.98	3,167.25	5.26	8.61	57.26	3,857.19	5,999.96	7,174.30	7,160.77	13.53	530.177	
2,500.00	2,500.00	3,263.58	3,241.38	5.48	8.81	57.24	3,855.54	5,991.62	7,163.70	7,149.75	13.96	513.325	
2,600.00	2,600.00	3,324.66	3,302.06	5.71	8.98	57.21	3,854.72	5,984.77	7,153.55	7,139.21	14.34	498.748	
2,700.00	2,700.00	3,400.00	3,376.96	5.93	9.18	57.18	3,854.35	5,976.61	7,144.09	7,129.33	14.77	483.827	
2,800.00	2,800.00	3,431.36	3,408.14	6.15	9.27	57.17	3,854.38	5,973.33	7,135.15	7,120.07	15.07	473.336	
2,900.00	2,900.00	3,500.00	3,476.44	6.38	9.45	57.14	3,854.62	5,966.51	7,126.92	7,111.44	15.48	460.486	
3,000.00	3,000.00	3,549.67	3,525.90	6.60	9.58	57.11	3,854.86	5,961.86	7,119.22	7,103.39	15.83	449.712	
3,100.00	3,100.00	3,619.08	3,595.04	6.83	9.76	57.09	3,855.13	5,955.75	7,112.03	7,095.79	16.23	438.080	
3,200.00	3,200.00	3,700.00	3,675.68	7.05	9.98	57.05	3,855.30	5,949.02	7,105.16	7,088.49	16.67	426.261	
3,300.00	3,300.00	3,777.40	3,752.83	7.28	10.17	57.03	3,855.35	5,942.93	7,098.58	7,081.48	17.09	415.258	
3,400.00	3,400.00	3,850.22	3,825.45	7.50	10.37	57.00	3,855.33	5,937.52	7,092.34	7,074.83	17.51	405.078	
3,500.00	3,500.00	3,920.73	3,895.80	7.73	10.56	56.98	3,855.26	5,932.66	7,086.50	7,068.59	17.92	395.523	
3,600.00	3,600.00	4,000.00	3,974.91	7.95	10.77	56.96	3,855.18	5,927.64	7,081.10	7,062.76	18.35	385.938	
3,700.00	3,700.00	4,082.38	4,057.13	8.18	10.98	56.94	3,855.16	5,922.63	7,075.98	7,057.19	18.79	376.656	
3,800.00	3,800.00	4,175.68	4,150.26	8.40	11.22	56.91	3,855.34	5,916.90	7,070.93	7,051.68	19.25	367.277	
3,900.00	3,900.00	4,278.67	4,253.04	8.63	11.49	56.88	3,855.94	5,910.37	7,065.93	7,046.19	19.74	357.928	
4,000.00	4,000.00	4,400.00	4,374.07	8.85	11.80	56.83	3,857.08	5,901.99	7,060.64	7,040.37	20.28	348.225	
4,100.00	4,100.00	4,479.87	4,453.75	9.07	12.01	132.36	3,857.87	5,896.40	7,055.93	7,035.24	20.69	340.969	
4,200.00	4,199.96	4,554.40	4,528.11	9.27	12.20	132.37	3,858.69	5,891.54	7,052.83	7,031.75	21.09	334.464	
4,300.00	4,299.86	4,635.38	4,608.94	9.48	12.40	132.38	3,859.51	5,886.62	7,051.23	7,029.73	21.50	327.993	
4,365.51	4,365.26	4,691.88	4,665.34	9.62	12.55	132.38	3,860.01	5,883.35	7,050.93	7,029.16	21.78	323.771	
4,393.15	4,392.85	4,715.72	4,689.14	9.67	12.61	132.38	3,860.20	5,882.00	7,050.99	7,029.09	21.90	322.026	
4,400.00	4,399.68	4,721.62	4,695.03	9.69	12.62	132.38	3,860.25	5,881.67	7,051.01	7,029.09	21.93	321.597	
4,500.00	4,499.44	4,808.67	4,781.95	9.90	12.85	132.39	3,860.87	5,876.98	7,051.50	7,029.15	22.36	315.414	
4,600.00	4,599.20	4,904.09	4,877.23	10.11	13.09	132.41	3,861.54	5,871.96	7,052.11	7,029.30	22.81	309.153	
4,700.00	4,698.97	5,000.00	4,973.01	10.33	13.34	132.42	3,862.23	5,866.93	7,052.74	7,029.47	23.27	303.101	
4,800.00	4,798.73	5,086.91	5,059.81	10.55	13.56	132.43	3,862.80	5,862.53	7,053.49	7,029.79	23.70	297.562	
4,900.00	4,898.50	5,168.05	5,140.86	10.76	13.77	132.44	3,863.30	5,858.71	7,054.51	7,030.38	24.13	292.405	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Coral - 2H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS, 7313-MWD-ISCWSA													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	
5,000.00	4,998.26	5,247.75	5,220.48	10.98	13.97	132.46	3,863.77	5,855.23	7,055.80	7,031.26	24.54	287.475	
5,100.00	5,098.03	5,327.98	5,300.64	11.20	14.18	132.47	3,864.30	5,851.98	7,057.39	7,032.43	24.96	282.703	
5,200.00	5,197.79	5,400.00	5,372.61	11.43	14.36	132.49	3,864.76	5,849.26	7,059.24	7,033.88	25.36	278.335	
5,300.00	5,297.56	5,486.55	5,459.11	11.65	14.58	132.51	3,865.31	5,846.31	7,061.37	7,035.58	25.80	273.707	
5,400.00	5,397.32	5,565.02	5,537.54	11.87	14.78	132.52	3,865.83	5,843.94	7,063.84	7,037.62	26.21	269.470	
5,500.00	5,497.09	5,662.89	5,635.37	12.10	15.02	132.55	3,866.48	5,841.24	7,066.53	7,039.85	26.68	264.869	
5,600.00	5,596.85	12,660.00	8,020.17	12.33	88.19	173.74	-904.48	6,451.82	7,041.70	6,947.02	94.69	74.368	
5,700.00	5,696.62	12,660.00	8,020.17	12.55	88.19	173.74	-904.48	6,451.82	7,014.38	6,919.04	95.35	73.568	
5,800.00	5,796.38	12,660.00	8,020.17	12.78	88.19	173.74	-904.48	6,451.82	6,988.39	6,892.39	95.99	72.800	
5,900.00	5,896.15	12,660.00	8,020.17	13.01	88.19	173.74	-904.48	6,451.82	6,963.73	6,867.10	96.63	72.064	
6,000.00	5,995.91	12,660.00	8,020.17	13.24	88.19	173.74	-904.48	6,451.82	6,940.43	6,843.17	97.26	71.360	
6,100.00	6,095.67	12,660.00	8,020.17	13.47	88.19	173.74	-904.48	6,451.82	6,918.49	6,820.61	97.88	70.687	
6,200.00	6,195.44	12,660.00	8,020.17	13.70	88.19	173.74	-904.48	6,451.82	6,897.93	6,799.45	98.48	70.045	
6,300.00	6,295.20	12,660.00	8,020.17	13.93	88.19	173.74	-904.48	6,451.82	6,878.77	6,779.70	99.07	69.433	
6,400.00	6,394.97	12,660.00	8,020.17	14.17	88.19	173.74	-904.48	6,451.82	6,861.01	6,761.36	99.65	68.853	
6,500.00	6,494.73	12,660.00	8,020.17	14.40	88.19	173.74	-904.48	6,451.82	6,844.66	6,744.45	100.21	68.302	
6,600.00	6,594.50	12,660.00	8,020.17	14.63	88.19	173.74	-904.48	6,451.82	6,829.74	6,728.98	100.76	67.782	
6,700.00	6,694.26	12,660.00	8,020.17	14.87	88.19	173.74	-904.48	6,451.82	6,816.26	6,714.97	101.29	67.292	
6,800.00	6,794.03	12,660.00	8,020.17	15.10	88.19	173.74	-904.48	6,451.82	6,804.22	6,702.41	101.81	66.832	
6,900.00	6,893.79	12,660.00	8,020.17	15.34	88.19	173.74	-904.48	6,451.82	6,793.63	6,691.31	102.31	66.400	
7,000.00	6,993.56	12,660.00	8,020.17	15.57	88.19	173.74	-904.48	6,451.82	6,784.49	6,681.69	102.80	65.998	
7,100.00	7,093.32	12,660.00	8,020.17	15.81	88.19	173.74	-904.48	6,451.82	6,776.82	6,673.56	103.27	65.625	
7,200.00	7,193.09	12,660.00	8,020.17	16.04	88.19	173.74	-904.48	6,451.82	6,770.62	6,666.90	103.72	65.280	
7,300.00	7,292.85	12,660.00	8,020.17	16.28	88.19	173.74	-904.48	6,451.82	6,765.89	6,661.74	104.15	64.964	
7,400.00	7,392.62	12,660.00	8,020.17	16.52	88.19	173.74	-904.48	6,451.82	6,762.64	6,658.07	104.56	64.675	
7,500.00	7,492.38	12,660.00	8,020.17	16.76	88.19	173.74	-904.48	6,451.82	6,760.86	6,655.90	104.96	64.414	
7,570.09	7,562.30	12,660.00	8,020.17	16.92	88.19	173.74	-904.48	6,451.82	6,760.50	6,655.27	105.23	64.248	
7,600.00	7,592.15	12,660.00	8,020.17	16.99	88.19	173.74	-904.48	6,451.82	6,760.56	6,655.23	105.34	64.181	
7,615.05	7,607.16	12,660.00	8,020.17	17.03	88.19	173.74	-904.48	6,451.82	6,760.65	6,655.26	105.39	64.148	
7,700.00	7,691.95	12,660.00	8,020.17	17.21	88.19	173.74	-904.48	6,451.82	6,761.12	6,655.44	105.68	63.978	
7,800.00	7,791.85	12,660.00	8,020.17	17.40	88.19	173.74	-904.48	6,451.82	6,761.44	6,655.46	105.98	63.797	
7,900.00	7,891.81	12,660.00	8,020.17	17.58	88.19	173.74	-904.48	6,451.82	6,761.50	6,655.24	106.27	63.627	
8,008.20	8,000.00	12,660.00	8,020.17	17.76	88.19	98.22	-904.48	6,451.82	6,761.28	6,654.73	106.55	63.454	
8,031.27	8,023.07	12,660.00	8,020.17	17.82	88.19	98.22	-904.48	6,451.82	6,761.25	6,654.63	106.62	63.417	
8,100.00	8,091.80	12,660.00	8,020.17	17.96	88.19	98.22	-904.48	6,451.82	6,761.59	6,654.80	106.80	63.314	
8,200.00	8,191.80	12,660.00	8,020.17	18.17	88.19	98.22	-904.48	6,451.82	6,763.35	6,656.29	107.06	63.175	
8,300.00	8,291.80	12,660.00	8,020.17	18.39	88.19	98.22	-904.48	6,451.82	6,766.58	6,659.28	107.30	63.061	
8,328.31	8,320.11	12,660.00	8,020.17	18.45	88.19	98.22	-904.48	6,451.82	6,767.77	6,660.40	107.37	63.034	
8,350.00	8,341.80	12,660.00	8,020.17	18.49	88.19	8.21	-904.48	6,451.82	6,768.35	6,660.94	107.41	63.013	
8,400.00	8,391.61	12,660.00	8,020.17	18.58	88.19	8.23	-904.48	6,451.82	6,766.86	6,659.35	107.50	62.947	
8,450.00	8,440.89	12,660.00	8,020.17	18.65	88.19	8.31	-904.48	6,451.82	6,761.43	6,653.85	107.58	62.850	
8,500.00	8,489.24	12,660.00	8,020.17	18.72	88.19	8.45	-904.48	6,451.82	6,752.09	6,644.44	107.65	62.724	
8,550.00	8,536.31	12,660.00	8,020.17	18.78	88.19	8.65	-904.48	6,451.82	6,738.90	6,631.20	107.70	62.568	
8,600.00	8,581.73	12,660.00	8,020.17	18.84	88.19	8.93	-904.48	6,451.82	6,721.94	6,614.19	107.75	62.384	
8,650.00	8,625.16	12,660.00	8,020.17	18.91	88.19	9.29	-904.48	6,451.82	6,701.30	6,593.52	107.78	62.173	
8,700.00	8,666.27	12,660.00	8,020.17	18.98	88.19	9.74	-904.48	6,451.82	6,677.12	6,569.31	107.81	61.935	
8,750.00	8,704.75	12,660.00	8,020.17	19.07	88.19	10.32	-904.48	6,451.82	6,649.54	6,541.71	107.82	61.671	
8,800.00	8,740.30	12,660.00	8,020.17	19.20	88.19	11.05	-904.48	6,451.82	6,618.72	6,510.89	107.83	61.382	
8,850.00	8,772.65	12,660.00	8,020.17	19.36	88.19	11.97	-904.48	6,451.82	6,584.86	6,477.03	107.83	61.069	
8,900.00	8,801.55	12,660.00	8,020.17	19.57	88.19	13.14	-904.48	6,451.82	6,548.17	6,440.35	107.82	60.734	
8,950.00	8,826.79	12,660.00	8,020.17	19.85	88.19	14.67	-904.48	6,451.82	6,508.88	6,401.08	107.80	60.378	
9,000.00	8,848.18	12,660.00	8,020.17	20.18	88.19	16.70	-904.48	6,451.82	6,467.25	6,359.47	107.78	60.002	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Coral - 2H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS, 7313-MWD-ISCWSA													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		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	
9,050.00	8,865.55	12,660.00	8,020.17	20.59	88.19	19.50	-904.48	6,451.82	6,423.56	6,315.79	107.76	59.609	
9,100.00	8,878.76	12,660.00	8,020.17	21.06	88.19	23.51	-904.48	6,451.82	6,378.09	6,270.35	107.74	59.200	
9,150.00	8,887.72	12,660.00	8,020.17	21.60	88.19	29.61	-904.48	6,451.82	6,331.16	6,223.44	107.71	58.778	
9,200.00	8,892.37	12,660.00	8,020.17	22.20	88.19	39.51	-904.48	6,451.82	6,283.09	6,175.40	107.69	58.345	
9,219.71	8,893.00	12,660.00	8,020.17	22.45	88.19	45.14	-904.48	6,451.82	6,263.91	6,156.23	107.68	58.171	
9,300.00	8,894.21	12,660.00	8,020.17	23.72	88.19	45.14	-904.48	6,451.82	6,185.57	6,072.85	112.72	54.875	
9,400.00	8,895.71	12,660.00	8,020.17	23.80	88.19	45.14	-904.48	6,451.82	6,088.07	5,975.37	112.70	54.022	
9,500.00	8,897.21	12,660.00	8,020.17	23.88	88.19	45.14	-904.48	6,451.82	5,990.65	5,877.98	112.67	53.170	
9,600.00	8,898.71	12,660.00	8,020.17	23.96	88.19	45.14	-904.48	6,451.82	5,893.32	5,780.68	112.64	52.319	
9,700.00	8,900.21	12,660.00	8,020.17	24.04	88.19	45.14	-904.48	6,451.82	5,796.08	5,683.47	112.61	51.469	
9,800.00	8,901.71	12,660.00	8,020.17	24.14	88.19	45.14	-904.48	6,451.82	5,698.93	5,586.35	112.58	50.621	
9,900.00	8,903.21	12,660.00	8,020.17	24.26	88.19	45.14	-904.48	6,451.82	5,601.89	5,489.34	112.55	49.774	
10,000.00	8,904.72	12,660.00	8,020.17	24.50	88.19	45.14	-904.48	6,451.82	5,504.95	5,392.44	112.51	48.928	
10,100.00	8,906.22	12,660.00	8,020.17	24.88	88.19	45.14	-904.48	6,451.82	5,408.12	5,295.65	112.47	48.084	
10,200.00	8,907.72	12,660.00	8,020.17	25.32	88.19	45.14	-904.48	6,451.82	5,311.41	5,198.98	112.43	47.242	
10,300.00	8,909.22	12,660.00	8,020.17	25.80	88.19	45.14	-904.48	6,451.82	5,214.83	5,102.44	112.39	46.401	
10,400.00	8,910.72	12,660.00	8,020.17	26.33	88.19	45.14	-904.48	6,451.82	5,118.37	5,006.03	112.34	45.562	
10,500.00	8,912.22	10,500.00	8,019.20	26.89	57.30	44.77	-893.24	6,453.85	5,022.04	4,945.45	76.60	65.563	
10,600.00	8,913.72	12,648.73	8,019.24	27.49	88.02	44.78	-893.44	6,453.87	4,925.89	4,813.75	112.13	43.929	
10,700.00	8,915.22	12,571.94	8,012.75	28.12	86.81	42.23	-818.12	6,467.33	4,829.69	4,718.31	111.38	43.360	
10,800.00	8,916.72	12,537.16	8,009.80	28.77	86.25	41.02	-783.96	6,473.13	4,733.44	4,622.43	111.01	42.638	
10,900.00	8,918.22	12,509.04	8,007.47	29.46	85.81	40.01	-756.31	6,477.75	4,637.25	4,526.54	110.71	41.887	
11,000.00	8,919.72	12,481.63	8,005.25	30.17	85.37	39.00	-729.36	6,482.19	4,541.13	4,430.71	110.41	41.128	
11,100.00	8,921.23	12,456.79	8,003.27	30.91	84.98	38.07	-704.92	6,486.17	4,445.08	4,334.93	110.14	40.357	
11,200.00	8,922.73	12,434.34	8,001.51	31.67	84.62	37.21	-682.82	6,489.74	4,349.12	4,239.23	109.90	39.575	
11,300.00	8,924.23	12,412.26	7,999.80	32.45	84.27	36.34	-661.08	6,493.21	4,253.27	4,143.61	109.65	38.788	
11,400.00	8,925.73	12,390.54	7,998.13	33.25	83.92	35.48	-639.69	6,496.60	4,157.53	4,048.11	109.42	37.997	
11,500.00	8,927.23	12,368.12	7,996.43	34.06	83.57	34.57	-617.61	6,500.07	4,061.92	3,952.74	109.17	37.206	
11,600.00	8,928.73	12,342.74	7,994.52	34.90	83.16	33.52	-592.60	6,503.95	3,966.42	3,857.52	108.91	36.420	
11,700.00	8,930.23	12,318.14	7,992.69	35.75	82.77	32.48	-568.35	6,507.64	3,871.06	3,762.41	108.65	35.630	
11,800.00	8,931.73	12,294.31	7,990.92	36.61	82.40	31.46	-544.84	6,511.17	3,775.84	3,667.45	108.40	34.834	
11,900.00	8,933.23	12,271.71	7,989.27	37.49	82.04	30.47	-522.55	6,514.46	3,680.79	3,572.63	108.15	34.033	
11,937.88	8,933.80	12,263.69	7,988.68	37.82	81.91	30.11	-514.63	6,515.62	3,644.82	3,536.75	108.07	33.727	
12,000.00	8,934.73	12,250.22	7,987.70	38.38	81.70	31.11	-501.34	6,517.55	3,585.97	3,478.04	107.92	33.227	
12,100.00	8,936.24	12,226.96	7,986.01	39.28	81.34	32.55	-478.38	6,520.85	3,491.62	3,383.95	107.67	32.430	
12,200.00	8,937.74	12,201.82	7,984.19	40.19	80.94	33.79	-453.55	6,524.36	3,397.80	3,290.42	107.38	31.642	
12,300.00	8,939.24	12,176.81	7,982.38	41.11	80.55	34.93	-428.85	6,527.81	3,304.56	3,197.47	107.09	30.859	
12,400.00	8,940.74	12,153.90	7,980.75	42.03	80.19	36.05	-406.21	6,530.94	3,211.95	3,105.16	106.80	30.076	
12,491.82	8,942.12	12,131.28	7,979.16	42.89	79.84	36.93	-383.86	6,534.02	3,127.54	3,021.04	106.50	29.365	
12,500.00	8,942.24	12,129.20	7,979.01	42.96	79.80	36.85	-381.80	6,534.30	3,120.05	3,013.57	106.48	29.302	
12,600.00	8,943.75	12,103.81	7,977.25	43.90	79.41	35.89	-356.71	6,537.75	3,028.65	2,922.50	106.15	28.533	
12,700.00	8,945.25	12,077.25	7,975.43	44.84	78.99	34.87	-330.46	6,541.34	2,937.61	2,831.81	105.80	27.765	
12,800.00	8,946.75	12,049.18	7,973.54	45.80	78.55	33.76	-302.70	6,545.10	2,846.95	2,741.51	105.44	27.000	
12,900.00	8,948.25	12,021.47	7,971.70	46.76	78.11	32.64	-275.30	6,548.76	2,756.71	2,651.63	105.08	26.234	
13,000.00	8,949.75	11,994.20	7,969.93	47.72	77.68	31.51	-248.32	6,552.33	2,666.93	2,562.22	104.71	25.469	
13,100.00	8,951.25	11,969.81	7,968.35	48.70	77.30	30.49	-224.19	6,555.49	2,577.68	2,473.32	104.36	24.699	
13,200.00	8,952.75	11,945.57	7,966.79	49.67	76.92	29.45	-200.20	6,558.62	2,489.03	2,385.03	104.00	23.932	
13,300.00	8,954.25	11,921.48	7,965.25	50.66	76.55	28.40	-176.36	6,561.71	2,401.05	2,297.42	103.63	23.169	
13,400.00	8,955.75	11,897.59	7,963.73	51.65	76.17	27.34	-152.71	6,564.76	2,313.81	2,210.57	103.25	22.410	
13,500.00	8,957.25	11,874.75	7,962.29	52.64	75.82	26.31	-130.11	6,567.67	2,227.42	2,124.56	102.85	21.656	
13,600.00	8,958.75	11,851.95	7,960.85	53.64	75.47	25.27	-107.54	6,570.56	2,141.97	2,039.54	102.43	20.911	
13,700.00	8,960.26	11,829.19	7,959.42	54.64	75.11	24.21	-85.01	6,573.45	2,057.59	1,955.60	101.99	20.175	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Coral - 2H - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 7313-MWD-ISCWSA														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	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)							
13,800.00	8,961.76	11,806.47	7,958.01	55.64	74.76	23.15	-62.52	6,576.32	1,974.41	1,872.90	101.51	19.450			
13,900.00	8,963.26	11,781.94	7,956.48	56.65	74.39	21.98	-38.23	6,579.41	1,892.59	1,791.60	100.99	18.740			
14,000.00	8,964.76	11,757.45	7,954.98	57.67	74.02	20.79	-13.97	6,582.47	1,812.30	1,711.88	100.42	18.047			
14,100.00	8,966.26	11,733.22	7,953.51	58.69	73.65	19.61	10.03	6,585.46	1,733.75	1,633.95	99.80	17.372			
14,200.00	8,967.76	11,709.25	7,952.07	59.71	73.28	18.42	33.77	6,588.39	1,657.20	1,558.09	99.11	16.721			
14,211.82	8,967.94	11,706.40	7,951.90	59.83	73.24	18.28	36.60	6,588.74	1,648.29	1,549.27	99.02	16.646			
14,300.00	8,969.26	11,685.88	7,950.70	60.73	72.93	16.30	56.93	6,591.23	1,582.80	1,484.46	98.34	16.095			
14,400.00	8,970.77	11,664.45	7,949.48	61.76	72.61	14.18	78.17	6,593.83	1,510.71	1,413.23	97.49	15.496			
14,500.00	8,972.28	11,644.96	7,948.41	62.80	72.32	12.21	97.48	6,596.19	1,441.39	1,344.86	96.53	14.932			
14,600.00	8,973.79	11,627.43	7,947.48	63.84	72.06	10.40	114.86	6,598.31	1,375.34	1,279.91	95.43	14.412			
14,700.00	8,975.30	11,611.62	7,946.66	64.88	71.82	8.76	130.53	6,600.22	1,313.15	1,218.97	94.18	13.943			
14,765.09	8,976.29	11,601.92	7,946.17	65.56	71.67	7.76	140.15	6,601.38	1,275.05	1,181.78	93.27	13.671			
14,800.00	8,976.82	11,597.00	7,945.93	65.92	71.60	7.49	145.03	6,601.97	1,255.49	1,162.74	92.75	13.537			
14,900.00	8,978.33	11,583.03	7,945.25	66.97	71.39	6.73	158.88	6,603.63	1,203.19	1,112.08	91.11	13.205			
15,000.00	8,979.85	11,569.29	7,944.60	68.02	71.18	5.99	172.52	6,605.25	1,157.05	1,067.76	89.30	12.957			
15,100.00	8,981.36	11,555.75	7,943.98	69.08	70.97	5.25	185.94	6,606.84	1,117.83	1,030.47	87.36	12.796			
15,200.00	8,982.88	11,542.43	7,943.38	70.13	70.77	4.53	199.16	6,608.38	1,086.29	1,000.86	85.43	12.716			
15,300.00	8,984.39	11,529.31	7,942.82	71.19	70.57	3.81	212.18	6,609.90	1,063.10	979.38	83.72	12.698			
15,400.00	8,985.91	11,516.46	7,942.28	72.25	70.38	3.11	224.93	6,611.36	1,048.84	966.32	82.51	12.711			
15,500.00	8,987.42	11,504.12	7,941.78	73.31	70.19	2.44	237.19	6,612.76	1,043.86	961.79	82.07	12.720			
15,502.81	8,987.46	11,503.78	7,941.76	73.34	70.19	2.42	237.53	6,612.80	1,043.85	961.79	82.07	12.720 CC, ES			
15,600.00	8,988.94	11,492.14	7,941.30	74.37	70.01	1.79	249.09	6,614.09	1,048.31	965.81	82.50	12.707			
15,700.00	8,990.45	11,480.51	7,940.85	75.44	69.84	1.15	260.63	6,615.36	1,062.08	978.38	83.69	12.690 SF			
15,800.00	8,991.97	11,469.22	7,940.42	76.50	69.67	0.54	271.85	6,616.58	1,084.81	999.43	85.38	12.706			
15,900.00	8,993.48	11,458.26	7,940.01	77.57	69.50	-0.06	282.74	6,617.74	1,115.97	1,028.71	87.25	12.790			
16,000.00	8,995.00	11,447.60	7,939.62	78.64	69.35	-0.64	293.33	6,618.86	1,154.87	1,065.77	89.10	12.962			
16,100.00	8,996.51	11,437.24	7,939.25	79.71	69.19	-1.21	303.63	6,619.93	1,200.77	1,109.99	90.78	13.227			
16,200.00	8,998.03	11,427.17	7,938.90	80.78	69.04	-1.75	313.65	6,620.95	1,252.90	1,160.66	92.24	13.583			
16,300.00	8,999.54	11,416.09	7,938.53	81.85	68.88	-2.36	324.66	6,622.07	1,310.52	1,217.07	93.45	14.024			
16,400.00	9,001.06	11,404.69	7,938.16	82.93	68.70	-2.97	336.00	6,623.22	1,372.93	1,278.51	94.42	14.541			
16,500.00	9,002.57	11,393.29	7,937.80	84.00	68.53	-3.59	347.34	6,624.37	1,439.51	1,344.32	95.19	15.122			
16,528.18	9,003.00	11,390.08	7,937.70	84.30	68.49	-3.77	350.53	6,624.69	1,458.94	1,363.57	95.38	15.297			

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx Offsets - Onyx PWU 29 #4H - OH - OH											Offset Site Error: 0.00 usft	
Survey Program: 100-NS-GYRO-MS, 7249-MWD-ISCWSA											Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance				Separation Factor	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)		
0.00	0.00	5.94	5.94	0.00	0.01	174.05	-913.49	95.14	918.43			
100.00	100.00	103.40	103.40	0.09	0.11	174.07	-913.67	94.88	918.59	918.39	0.20	4,699.219
200.00	200.00	202.85	202.84	0.31	0.37	174.11	-914.06	94.24	918.92	918.23	0.68	1,344.761
300.00	300.00	305.79	305.78	0.54	0.64	174.17	-914.35	93.43	919.11	917.94	1.18	782.069
400.00	400.00	409.67	409.66	0.76	0.88	174.21	-914.24	92.70	918.94	917.29	1.64	558.697
500.00	500.00	512.59	512.58	0.99	1.07	174.23	-913.68	92.32	918.36	916.31	2.05	447.254
600.00	600.00	611.56	611.55	1.21	1.18	174.21	-913.03	92.52	917.72	915.33	2.39	383.398
700.00	700.00	711.84	711.82	1.43	1.28	174.15	-912.30	93.40	917.09	914.37	2.72	337.426
800.00	800.00	808.56	808.52	1.66	1.40	174.05	-911.72	94.99	916.65	913.60	3.05	300.104
900.00	900.00	907.26	907.21	1.88	1.53	173.94	-911.34	96.73	916.47	913.05	3.42	268.121
1,000.00	1,000.00	1,007.06	1,007.00	2.11	1.70	173.85	-911.08	98.15	916.35	912.54	3.81	240.385
1,100.00	1,100.00	1,106.54	1,106.48	2.33	1.89	173.79	-910.90	99.18	916.29	912.06	4.23	216.777
1,179.18	1,179.18	1,185.35	1,185.28	2.51	2.05	173.75	-910.82	99.74	916.27	911.70	4.57	200.666
1,200.00	1,200.00	1,206.10	1,206.03	2.56	2.10	173.74	-910.81	99.85	916.27	911.61	4.66	196.789
1,300.00	1,300.00	1,306.12	1,306.05	2.78	2.31	173.71	-910.77	100.31	916.28	911.18	5.10	179.751
1,400.00	1,400.00	1,405.90	1,405.82	3.01	2.54	173.69	-910.74	100.72	916.29	910.75	5.55	165.206
1,500.00	1,500.00	1,505.67	1,505.59	3.23	2.77	173.67	-910.75	101.06	916.34	910.34	6.00	152.737
1,600.00	1,600.00	1,605.74	1,605.67	3.46	3.00	173.65	-910.77	101.32	916.39	909.93	6.46	141.917
1,700.00	1,700.00	1,704.67	1,704.60	3.68	3.23	173.63	-910.84	101.61	916.49	909.58	6.91	132.613
1,800.00	1,800.00	1,803.71	1,803.64	3.91	3.45	173.61	-911.01	102.03	916.71	909.35	7.36	124.519
1,900.00	1,900.00	1,904.12	1,904.04	4.13	3.69	173.58	-911.20	102.57	916.96	909.13	7.82	117.214
2,000.00	2,000.00	2,004.78	2,004.70	4.36	3.94	173.54	-911.32	103.22	917.14	908.85	8.29	110.573
2,100.00	2,100.00	2,104.70	2,104.61	4.58	4.19	173.50	-911.40	103.85	917.30	908.53	8.77	104.616
2,200.00	2,200.00	2,204.76	2,204.68	4.81	4.44	173.47	-911.50	104.36	917.46	908.21	9.24	99.267
2,300.00	2,300.00	2,303.83	2,303.74	5.03	4.68	173.45	-911.67	104.74	917.67	907.96	9.71	94.545
2,400.00	2,400.00	2,405.05	2,404.97	5.26	4.92	173.43	-911.82	105.07	917.86	907.68	10.18	90.189
2,500.00	2,500.00	2,506.70	2,506.61	5.48	5.18	173.41	-911.82	105.39	917.89	907.23	10.66	86.129
2,600.00	2,600.00	2,608.04	2,607.96	5.71	5.41	173.39	-911.66	105.60	917.76	906.64	11.11	82.572
2,700.00	2,700.00	2,708.35	2,708.26	5.93	5.61	173.38	-911.43	105.71	917.54	906.00	11.54	79.494
2,800.00	2,800.00	2,808.80	2,808.71	6.15	5.80	173.38	-911.15	105.78	917.28	905.32	11.95	76.734
2,900.00	2,900.00	2,908.75	2,908.66	6.38	5.96	173.38	-910.87	105.78	917.00	904.65	12.34	74.288
3,000.00	3,000.00	3,008.90	3,008.81	6.60	6.10	173.38	-910.60	105.66	916.71	904.01	12.70	72.170
3,100.00	3,100.00	3,110.57	3,110.49	6.83	6.22	173.40	-910.24	105.38	916.33	903.29	13.04	70.250
3,200.00	3,200.00	3,212.58	3,212.49	7.05	6.35	173.41	-909.65	105.03	915.72	902.32	13.40	68.327
3,300.00	3,300.00	3,311.08	3,310.98	7.28	6.50	173.43	-909.07	104.76	915.10	901.32	13.78	66.418
3,400.00	3,400.00	3,409.70	3,409.61	7.50	6.66	173.43	-908.66	104.59	914.67	900.51	14.16	64.592
3,500.00	3,500.00	3,512.86	3,512.77	7.73	6.81	173.46	-908.11	104.18	914.09	899.55	14.54	62.865
3,600.00	3,600.00	3,613.37	3,613.27	7.95	6.94	173.51	-907.46	103.24	913.34	898.45	14.90	61.317
3,700.00	3,700.00	3,714.80	3,714.69	8.18	7.06	173.60	-906.75	101.68	912.47	897.23	15.24	59.874
3,800.00	3,800.00	3,816.12	3,815.98	8.40	7.19	173.73	-905.98	99.55	911.49	895.90	15.59	58.479
3,900.00	3,900.00	3,920.91	3,920.73	8.63	7.32	173.88	-904.85	96.96	910.15	894.20	15.95	57.067
4,000.00	4,000.00	4,024.79	4,024.56	8.85	7.48	174.04	-903.18	94.22	908.27	891.95	16.33	55.631
4,100.00	4,100.00	4,124.72	4,124.44	9.07	7.64	-110.35	-901.42	91.55	906.55	889.85	16.70	54.286
4,200.00	4,199.96	4,224.80	4,224.47	9.27	7.80	-110.36	-899.66	88.88	905.43	888.36	17.07	53.045
4,300.00	4,299.86	4,325.01	4,324.63	9.48	7.97	-110.46	-897.88	86.16	904.91	887.46	17.45	51.869
4,339.85	4,339.65	4,364.97	4,364.56	9.56	8.04	-110.53	-897.16	85.05	904.86	887.26	17.60	51.416 CC
4,393.15	4,392.85	4,418.00	4,417.56	9.67	8.13	-110.64	-896.21	83.56	904.95	887.15	17.80	50.832
4,400.00	4,399.68	4,424.71	4,424.27	9.69	8.15	-110.66	-896.09	83.37	904.97	887.14	17.83	50.758 ES
4,500.00	4,499.44	4,522.75	4,522.26	9.90	8.32	-110.90	-894.47	80.66	905.46	887.25	18.21	49.710
4,600.00	4,599.20	4,620.97	4,620.44	10.11	8.49	-111.14	-893.04	78.02	906.17	887.57	18.60	48.708
4,700.00	4,698.97	4,719.72	4,719.14	10.33	8.67	-111.38	-891.76	75.34	907.05	888.05	19.00	47.748
4,800.00	4,798.73	4,819.73	4,819.10	10.55	8.85	-111.61	-890.59	72.50	908.05	888.66	19.39	46.820

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Onyx Offsets - Onyx PWU 29 #4H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 100-NS-GYRO-MS, 7249-MWD-ISCWSA													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)				
4,900.00	4,898.50	4,923.87	4,923.18	10.76	9.05	-111.86	-889.04	69.51	908.76	888.95	19.81	45.877		
5,000.00	4,998.26	5,024.95	5,024.21	10.98	9.25	-112.09	-887.25	66.54	909.18	888.95	20.23	44.948		
5,100.00	5,098.03	5,123.20	5,122.40	11.20	9.45	-112.33	-885.51	63.80	909.65	889.00	20.65	44.058		
5,200.00	5,197.79	5,220.93	5,220.09	11.43	9.65	-112.57	-884.07	61.19	910.44	889.37	21.07	43.217		
5,300.00	5,297.56	5,324.13	5,323.23	11.65	9.86	-112.80	-882.47	58.09	911.12	889.62	21.50	42.381		
5,400.00	5,397.32	5,425.94	5,424.96	11.87	10.07	-113.00	-880.63	54.52	911.49	889.56	21.93	41.561		
5,500.00	5,497.09	5,524.69	5,523.62	12.10	10.28	-113.17	-878.91	50.67	911.87	889.51	22.36	40.782		
5,600.00	5,596.85	5,622.84	5,621.67	12.33	10.48	-113.31	-877.40	46.51	912.42	889.63	22.79	40.042		
5,700.00	5,696.62	5,719.76	5,718.49	12.55	10.67	-113.44	-876.22	42.21	913.25	890.04	23.21	39.348		
5,800.00	5,796.38	5,816.75	5,815.38	12.78	10.87	-113.56	-875.39	37.85	914.43	890.79	23.63	38.695		
5,900.00	5,896.15	5,914.94	5,913.47	13.01	11.07	-113.69	-874.76	33.60	915.86	891.80	24.06	38.072		
6,000.00	5,995.91	6,013.08	6,011.53	13.24	11.26	-113.84	-874.27	29.70	917.49	893.01	24.48	37.476		
6,100.00	6,095.67	6,111.04	6,109.43	13.47	11.46	-114.02	-873.91	26.29	919.34	894.43	24.91	36.907		
6,200.00	6,195.44	6,209.32	6,207.67	13.70	11.66	-114.23	-873.66	23.48	921.41	896.07	25.34	36.362		
6,300.00	6,295.20	6,310.21	6,308.53	13.93	11.88	-114.48	-873.33	21.04	923.51	897.73	25.78	35.822		
6,400.00	6,394.97	6,409.25	6,407.55	14.17	12.09	-114.74	-872.95	18.97	925.62	899.40	26.22	35.298		
6,500.00	6,494.73	6,506.31	6,504.59	14.40	12.29	-115.02	-872.68	17.35	927.94	901.28	26.66	34.807		
6,600.00	6,594.50	6,600.00	6,598.28	14.63	12.47	-115.31	-872.91	16.32	930.89	903.83	27.06	34.398		
6,700.00	6,694.26	6,695.41	6,693.69	14.87	12.59	-115.64	-873.58	15.89	934.43	907.02	27.42	34.083		
6,800.00	6,794.03	6,797.13	6,795.40	15.10	12.69	-116.02	-874.20	15.98	938.05	910.30	27.75	33.805		
6,900.00	6,893.79	6,894.77	6,893.04	15.34	12.78	-116.40	-874.73	16.33	941.69	913.62	28.07	33.551		
7,000.00	6,993.56	6,991.92	6,990.19	15.57	12.87	-116.78	-875.52	16.69	945.63	917.24	28.39	33.306		
7,100.00	7,093.32	7,083.74	7,081.99	15.81	12.97	-117.11	-876.79	16.85	950.14	921.42	28.72	33.084		
7,200.00	7,193.09	7,168.48	7,166.70	16.04	13.07	-117.38	-879.03	16.75	955.84	926.81	29.04	32.919		
7,300.00	7,292.85	7,272.42	7,270.58	16.28	13.13	-117.82	-881.95	18.42	962.14	932.81	29.33	32.805		
7,400.00	7,392.62	7,335.28	7,332.87	16.52	13.13	-118.49	-882.92	26.40	970.07	940.44	29.63	32.735		
7,500.00	7,492.38	7,395.82	7,391.37	16.76	13.15	-119.56	-884.16	41.79	982.21	952.31	29.90	32.849		
7,600.00	7,592.15	7,504.00	7,490.12	16.99	13.21	-122.37	-882.76	85.48	997.18	967.11	30.08	33.157		
7,615.05	7,607.16	7,504.00	7,490.12	17.03	13.21	-122.37	-882.76	85.48	999.48	969.36	30.12	33.183		
7,700.00	7,691.95	7,545.67	7,526.14	17.21	13.26	-123.78	-880.86	106.33	1,014.42	984.15	30.27	33.510		
7,800.00	7,791.85	7,586.18	7,560.40	17.40	13.33	-125.22	-880.25	127.95	1,036.89	1,006.54	30.35	34.164		
7,900.00	7,891.81	7,632.00	7,598.47	17.58	13.42	-126.82	-881.28	153.40	1,064.38	1,034.02	30.37	35.050		
8,008.20	8,000.00	7,663.00	7,623.14	17.78	13.51	156.43	-882.72	172.11	1,099.52	1,069.27	30.24	36.355		
8,100.00	8,091.80	7,695.00	7,647.35	17.96	13.62	155.42	-884.64	192.95	1,134.25	1,104.14	30.11	37.667		
8,200.00	8,191.80	7,713.74	7,660.90	18.17	13.71	154.81	-885.96	205.82	1,177.17	1,147.32	29.84	39.443		
8,300.00	8,291.80	7,740.88	7,679.69	18.39	13.84	153.91	-888.05	225.29	1,225.25	1,195.67	29.58	41.421		
8,328.31	8,320.11	7,748.34	7,684.67	18.45	13.88	153.65	-888.62	230.82	1,239.72	1,210.22	29.50	42.025		
8,350.00	8,341.80	7,759.00	7,691.64	18.49	13.93	62.14	-889.45	238.84	1,250.91	1,221.45	29.47	42.453		
8,400.00	8,391.61	7,772.84	7,700.45	18.58	14.02	59.18	-890.43	249.46	1,276.11	1,246.81	29.30	43.552		
8,450.00	8,440.89	7,791.00	7,711.63	18.65	14.13	56.34	-891.45	263.74	1,300.28	1,271.13	29.15	44.603		
8,500.00	8,489.24	7,823.00	7,730.18	18.72	14.36	53.45	-892.53	289.79	1,323.19	1,294.08	29.11	45.459		
8,550.00	8,536.31	7,833.48	7,735.91	18.78	14.44	51.34	-892.72	298.56	1,344.66	1,315.76	28.90	46.531		
8,600.00	8,581.73	7,855.00	7,747.10	18.84	14.62	49.24	-893.01	316.94	1,364.77	1,336.00	28.77	47.430		
8,650.00	8,625.16	7,855.00	7,747.10	18.91	14.62	47.74	-893.01	316.94	1,383.37	1,354.88	28.49	48.563		
8,700.00	8,666.27	7,887.00	7,762.25	18.98	14.92	45.97	-893.25	345.11	1,400.17	1,371.69	28.48	49.165		
8,750.00	8,704.75	7,887.00	7,762.25	19.07	14.92	44.84	-893.25	345.11	1,415.31	1,387.08	28.23	50.142		
8,800.00	8,740.30	7,918.00	7,775.04	19.20	15.25	43.56	-893.33	373.35	1,428.63	1,400.36	28.27	50.535		
8,850.00	8,772.65	7,918.00	7,775.04	19.36	15.25	42.76	-893.33	373.35	1,439.99	1,411.90	28.09	51.264		
8,900.00	8,801.55	7,935.93	7,781.49	19.57	15.46	41.98	-893.39	390.07	1,449.48	1,421.36	28.12	51.546		
8,950.00	8,826.79	7,950.00	7,786.09	19.85	15.63	41.41	-893.49	403.37	1,457.01	1,428.84	28.17	51.723		
9,000.00	8,848.18	7,964.10	7,790.31	20.18	15.81	41.00	-893.62	416.82	1,462.52	1,434.22	28.29	51.693		
9,050.00	8,865.55	7,982.00	7,795.08	20.59	16.04	40.74	-893.81	434.07	1,465.95	1,437.42	28.53	51.390		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx Offsets - Onyx PWU 29 #4H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-NS-GYRO-MS, 7249-MWD-ISCWSA													Offset Well Error: 0.00 usft
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
9,100.00	8,878.76	7,982.00	7,795.08	21.06	16.04	40.65	-893.81	434.07	1,467.41	1,438.73	28.69	51.154	
9,150.00	8,887.72	8,014.00	7,801.90	21.60	16.49	40.74	-894.37	465.32	1,466.70	1,437.49	29.20	50.227	
9,200.00	8,892.37	8,014.00	7,801.90	22.20	16.49	40.92	-894.37	465.32	1,463.86	1,434.33	29.53	49.573	
9,219.71	8,893.00	8,026.09	7,803.96	22.45	16.67	41.08	-894.69	477.23	1,462.17	1,432.38	29.79	49.090	
9,300.00	8,894.21	8,073.78	7,810.61	23.72	17.40	41.28	-896.10	524.44	1,455.92	1,425.04	30.88	47.149	
9,400.00	8,895.71	8,110.00	7,814.61	23.80	17.98	41.40	-897.04	560.42	1,450.81	1,419.77	31.04	46.742	
9,500.00	8,897.21	8,174.00	7,818.81	23.88	19.09	41.55	-899.52	624.23	1,449.48	1,417.85	31.63	45.824	
9,517.28	8,897.47	8,187.97	7,819.54	23.89	19.34	41.59	-900.08	638.17	1,449.46	1,417.68	31.79	45.602	
9,600.00	8,898.71	8,237.00	7,821.18	23.96	20.25	41.66	-901.77	687.14	1,450.31	1,418.00	32.30	44.894	
9,700.00	8,900.21	8,319.64	7,820.54	24.04	21.84	41.67	-903.93	769.74	1,453.65	1,420.36	33.28	43.674	
9,800.00	8,901.71	8,423.21	7,819.32	24.14	23.94	41.67	-906.43	873.28	1,457.26	1,422.63	34.63	42.076	
9,900.00	8,903.21	8,578.51	7,819.71	24.26	27.25	41.65	-907.36	1,028.56	1,458.58	1,421.77	36.80	39.630	
10,000.00	8,904.72	8,693.34	7,821.35	24.50	29.78	41.59	-905.20	1,143.36	1,457.36	1,418.43	38.93	37.433	
10,100.00	8,906.22	8,795.81	7,823.46	24.88	32.08	41.55	-903.36	1,245.79	1,455.75	1,414.83	40.92	35.578	
10,200.00	8,907.72	8,897.94	7,826.25	25.32	34.42	41.54	-902.01	1,347.87	1,453.94	1,410.97	42.98	33.832	
10,300.00	8,909.22	9,000.16	7,829.81	25.80	36.79	41.57	-901.34	1,450.03	1,452.03	1,406.91	45.12	32.183	
10,400.00	8,910.72	9,067.90	7,832.92	26.33	38.85	41.61	-901.00	1,537.71	1,450.26	1,403.23	47.03	30.834	
10,500.00	8,912.22	9,174.98	7,834.36	26.89	40.90	41.59	-900.38	1,624.77	1,449.66	1,400.71	48.95	29.617	
10,586.38	8,913.52	9,257.37	7,835.11	27.41	42.85	41.56	-899.69	1,707.16	1,449.56	1,398.81	50.76	28.560	
10,600.00	8,913.72	9,270.62	7,835.19	27.49	43.17	41.55	-899.56	1,720.41	1,449.56	1,398.52	51.04	28.398	
10,700.00	8,915.22	9,369.68	7,835.54	28.12	45.53	41.49	-898.41	1,819.46	1,449.65	1,396.43	53.22	27.237	
10,800.00	8,916.72	9,490.30	7,836.49	28.77	48.43	41.42	-896.78	1,940.06	1,449.35	1,393.50	55.84	25.954	
10,900.00	8,918.22	9,601.31	7,838.80	29.46	51.10	41.37	-894.42	2,051.03	1,447.49	1,389.18	58.31	24.823	
11,000.00	8,919.72	9,710.77	7,841.81	30.17	53.75	41.33	-891.90	2,160.42	1,445.03	1,384.25	60.79	23.772	
11,100.00	8,921.23	9,803.16	7,844.45	30.91	55.99	41.30	-889.87	2,252.74	1,442.55	1,379.58	62.97	22.909	
11,200.00	8,922.73	9,898.00	7,847.06	31.67	58.30	41.28	-888.29	2,347.53	1,440.52	1,375.29	65.23	22.083	
11,300.00	8,924.23	10,002.82	7,850.18	32.45	60.86	41.28	-886.74	2,452.29	1,438.43	1,370.72	67.71	21.244	
11,400.00	8,925.73	10,095.59	7,853.05	33.25	63.13	41.29	-885.70	2,545.02	1,436.49	1,366.50	69.99	20.524	
11,500.00	8,927.23	10,193.31	7,856.03	34.06	65.52	41.31	-885.11	2,642.69	1,434.93	1,362.53	72.40	19.820	
11,600.00	8,928.73	10,303.46	7,858.94	34.90	68.22	41.28	-883.15	2,752.78	1,432.88	1,357.88	75.01	19.103	
11,700.00	8,930.23	10,425.98	7,862.19	35.75	71.23	41.23	-880.20	2,875.22	1,430.56	1,352.74	77.82	18.382	
11,800.00	8,931.73	10,558.11	7,866.74	36.61	74.42	41.20	-875.02	3,005.08	1,425.16	1,344.38	80.78	17.642	
11,900.00	8,933.23	10,670.04	7,876.10	37.49	77.21	41.20	-870.21	3,118.67	1,418.63	1,335.14	83.49	16.991	
11,937.88	8,933.80	10,702.26	7,878.31	37.82	78.00	41.21	-868.89	3,150.79	1,416.08	1,331.73	84.34	16.790	
12,000.00	8,934.73	10,757.00	7,881.97	38.38	79.35	41.27	-866.97	3,205.37	1,412.44	1,326.65	85.79	16.464	
12,100.00	8,936.24	10,849.84	7,888.13	39.28	81.63	41.42	-864.39	3,297.97	1,408.02	1,319.73	88.29	15.947	
12,200.00	8,937.74	10,941.01	7,894.11	40.19	83.88	41.63	-862.42	3,388.93	1,405.25	1,314.39	90.87	15.465	
12,268.57	8,938.77	10,994.58	7,897.38	40.82	85.21	41.77	-861.64	3,442.38	1,404.59	1,312.07	92.52	15.182	
12,300.00	8,939.24	11,018.60	7,898.73	41.11	85.80	41.84	-861.45	3,466.37	1,404.73	1,311.45	93.28	15.060	
12,400.00	8,940.74	11,089.61	7,902.01	42.03	87.56	42.05	-861.40	3,537.30	1,407.18	1,311.56	95.62	14.716	
12,491.82	8,942.12	11,156.73	7,903.53	42.89	89.22	42.23	-861.73	3,604.40	1,412.39	1,314.56	97.83	14.437	
12,500.00	8,942.24	11,164.18	7,903.65	42.96	89.40	42.25	-861.79	3,611.84	1,412.96	1,314.90	98.06	14.410	
12,600.00	8,943.75	11,259.90	7,905.10	43.90	91.78	42.56	-862.90	3,707.55	1,420.25	1,319.29	100.97	14.067	
12,700.00	8,945.25	11,360.98	7,906.93	44.84	94.29	42.89	-863.99	3,808.61	1,427.31	1,323.30	104.01	13.722	
12,800.00	8,946.75	11,446.75	7,908.34	45.80	96.42	43.18	-865.62	3,894.35	1,435.10	1,328.32	106.78	13.440	
12,900.00	8,948.25	11,540.20	7,909.19	46.76	98.74	43.49	-867.63	3,987.77	1,443.64	1,333.93	109.71	13.159	
13,000.00	8,949.75	11,659.30	7,910.46	47.72	101.70	43.87	-869.92	4,106.84	1,452.02	1,338.80	113.21	12.825	
13,100.00	8,951.25	11,816.15	7,915.82	48.70	105.60	44.39	-870.13	4,263.59	1,457.47	1,339.97	117.50	12.404	
13,200.00	8,952.75	11,944.18	7,923.34	49.67	108.77	44.82	-867.70	4,391.37	1,459.74	1,338.55	121.19	12.045	
13,300.00	8,954.25	12,049.91	7,931.11	50.66	111.39	45.22	-865.78	4,496.80	1,461.13	1,336.59	124.54	11.732	
13,400.00	8,955.75	12,120.00	7,936.87	51.65	113.12	45.51	-864.84	4,566.65	1,462.65	1,335.37	127.28	11.491	
13,500.00	8,957.25	12,120.00	7,936.87	52.64	113.12	45.51	-864.84	4,566.65	1,469.38	1,341.06	128.32	11.451 SF	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx Offsets - Onyx PWU 29 #4H - OH - OH													Offset Site Error: 0.00 usft	
Survey Program: 100-NS-GYRO-MS, 7249-MWD-ISCWSA													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	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)						
13,600.00	8,958.75	12,120.00	7,936.87	53.64	113.12	45.51	-864.84	4,566.65	1,482.84	1,353.97	128.86	11.507		
13,700.00	8,960.26	12,120.00	7,936.87	54.64	113.12	45.51	-864.84	4,566.65	1,502.84	1,373.92	128.92	11.657		
13,800.00	8,961.76	12,120.00	7,936.87	55.64	113.12	45.51	-864.84	4,566.65	1,529.14	1,400.60	128.54	11.896		
13,900.00	8,963.26	12,120.00	7,936.87	56.65	113.12	45.51	-864.84	4,566.65	1,561.41	1,433.65	127.75	12.222		
14,000.00	8,964.76	12,120.00	7,936.87	57.67	113.12	45.51	-864.84	4,566.65	1,599.29	1,472.66	126.63	12.629		
14,100.00	8,966.26	12,120.00	7,936.87	58.69	113.12	45.51	-864.84	4,566.65	1,642.39	1,517.16	125.23	13.115		
14,200.00	8,967.76	12,120.00	7,936.87	59.71	113.12	45.51	-864.84	4,566.65	1,690.32	1,566.71	123.61	13.674		
14,211.82	8,967.94	12,120.00	7,936.87	59.83	113.12	45.51	-864.84	4,566.65	1,696.29	1,572.88	123.41	13.745		
14,300.00	8,969.26	12,120.00	7,936.87	60.73	113.12	45.88	-864.84	4,566.65	1,742.27	1,620.46	121.80	14.304		
14,400.00	8,970.77	12,120.00	7,936.87	61.76	113.12	46.32	-864.84	4,566.65	1,797.26	1,677.46	119.80	15.002		
14,500.00	8,972.28	12,120.00	7,936.87	62.80	113.12	46.79	-864.84	4,566.65	1,855.01	1,737.35	117.66	15.766		
14,600.00	8,973.79	12,120.00	7,936.87	63.84	113.12	47.29	-864.84	4,566.65	1,915.25	1,799.84	115.41	16.596		
14,700.00	8,975.30	12,120.00	7,936.87	64.88	113.12	47.82	-864.84	4,566.65	1,977.73	1,864.65	113.08	17.490		
14,765.09	8,976.29	12,120.00	7,936.87	65.56	113.12	48.17	-864.84	4,566.65	2,019.49	1,907.97	111.53	18.107		
14,800.00	8,976.82	12,120.00	7,936.87	65.92	113.12	48.17	-864.84	4,566.65	2,042.29	1,931.59	110.70	18.449		
14,900.00	8,978.33	12,120.00	7,936.87	66.97	113.12	48.17	-864.84	4,566.65	2,109.41	2,001.06	108.35	19.468		
15,000.00	8,979.85	12,120.00	7,936.87	68.02	113.12	48.17	-864.84	4,566.65	2,179.06	2,073.00	106.06	20.545		
15,100.00	8,981.36	12,120.00	7,936.87	69.08	113.12	48.17	-864.84	4,566.65	2,251.00	2,147.15	103.85	21.676		
15,200.00	8,982.88	12,120.00	7,936.87	70.13	113.12	48.17	-864.84	4,566.65	2,325.01	2,223.30	101.72	22.858		
15,300.00	8,984.39	12,120.00	7,936.87	71.19	113.12	48.17	-864.84	4,566.65	2,400.91	2,301.24	99.67	24.089		
15,400.00	8,985.91	12,120.00	7,936.87	72.25	113.12	48.17	-864.84	4,566.65	2,478.52	2,380.81	97.71	25.367		
15,500.00	8,987.42	12,120.00	7,936.87	73.31	113.12	48.17	-864.84	4,566.65	2,557.69	2,461.85	95.84	26.688		
15,600.00	8,988.94	12,120.00	7,936.87	74.37	113.12	48.17	-864.84	4,566.65	2,638.27	2,544.21	94.06	28.050		
15,700.00	8,990.45	12,120.00	7,936.87	75.44	113.12	48.17	-864.84	4,566.65	2,720.14	2,627.78	92.36	29.451		
15,800.00	8,991.97	12,120.00	7,936.87	76.50	113.12	48.17	-864.84	4,566.65	2,803.18	2,712.43	90.75	30.889		
15,900.00	8,993.48	12,120.00	7,936.87	77.57	113.12	48.17	-864.84	4,566.65	2,887.30	2,798.08	89.22	32.361		
16,000.00	8,995.00	12,120.00	7,936.87	78.64	113.12	48.17	-864.84	4,566.65	2,972.41	2,884.63	87.77	33.865		
16,100.00	8,996.51	12,120.00	7,936.87	79.71	113.12	48.17	-864.84	4,566.65	3,058.41	2,972.01	86.40	35.398		
16,200.00	8,998.03	12,120.00	7,936.87	80.78	113.12	48.17	-864.84	4,566.65	3,145.25	3,060.15	85.10	36.960		
16,300.00	8,999.54	12,120.00	7,936.87	81.85	113.12	48.17	-864.84	4,566.65	3,232.84	3,148.98	83.87	38.548		
16,400.00	9,001.06	12,120.00	7,936.87	82.93	113.12	48.17	-864.84	4,566.65	3,321.14	3,238.44	82.70	40.159		
16,500.00	9,002.57	12,120.00	7,936.87	84.00	113.12	48.17	-864.84	4,566.65	3,410.08	3,328.49	81.59	41.793		
16,528.18	9,003.00	12,120.00	7,936.87	84.30	113.12	48.17	-864.84	4,566.65	3,435.25	3,353.96	81.29	42.257		

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - OH (Actual)											Offset Site Error: 0.00 usft		
Survey Program: 188- VES GyroFlex V2, 6335-LEAM MWD-ADJ, 11845-Project											Offset Well Error: 0.00 usft		
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
0.00	0.00	0.00	0.00	0.00	0.00	-39.68	565.62	-469.19	734.89				
100.00	100.00	101.95	101.95	0.09	0.08	-39.70	565.31	-469.26	734.70	734.53	0.16	4,454.211	
200.00	200.00	204.38	204.38	0.31	0.17	-39.75	564.38	-469.45	734.12	733.65	0.47	1,547.738	
300.00	300.00	304.60	304.58	0.54	0.29	-39.83	563.23	-469.68	733.39	732.57	0.82	896.277	
400.00	400.00	404.99	404.97	0.76	0.40	-39.90	562.05	-469.90	732.62	731.47	1.15	634.676	
500.00	500.00	506.26	506.24	0.99	0.48	-39.97	560.78	-470.01	731.74	730.28	1.45	504.039	
600.00	600.00	608.02	607.98	1.21	0.55	-40.03	559.41	-469.95	730.67	728.92	1.75	418.166	
700.00	700.00	711.78	711.73	1.43	0.61	-40.06	558.03	-469.22	729.19	727.16	2.03	358.365	
800.00	800.00	814.86	814.79	1.66	0.67	-40.03	556.72	-467.60	727.21	724.90	2.32	313.595	
900.00	900.00	916.11	916.01	1.88	0.72	-39.93	555.75	-465.23	724.97	722.37	2.59	279.387	
1,000.00	1,000.00	1,015.96	1,015.81	2.11	0.77	-39.78	555.17	-462.20	722.58	719.71	2.87	251.526	
1,100.00	1,100.00	1,112.48	1,112.30	2.33	0.81	-39.64	554.78	-459.54	720.51	717.36	3.14	229.314	
1,200.00	1,200.00	1,209.00	1,208.79	2.56	0.86	-39.52	554.50	-457.46	718.91	715.50	3.41	210.771	
1,300.00	1,300.00	1,305.40	1,305.18	2.78	0.89	-39.42	554.50	-455.80	717.82	714.14	3.68	195.311	
1,400.00	1,400.00	1,402.15	1,401.92	3.01	0.93	-39.32	554.84	-454.47	717.22	713.28	3.94	182.073	
1,500.00	1,500.00	1,500.90	1,500.66	3.23	0.97	-39.23	555.29	-453.44	716.91	712.71	4.20	170.756	
1,600.00	1,600.00	1,599.68	1,599.44	3.46	1.00	-39.17	555.70	-452.74	716.78	712.32	4.46	160.818	
1,632.13	1,632.13	1,631.48	1,631.23	3.53	1.01	-39.15	555.83	-452.56	716.77	712.24	4.54	157.927	
1,700.00	1,700.00	1,698.63	1,698.38	3.68	1.03	-39.11	556.17	-452.20	716.81	712.10	4.71	152.160	
1,800.00	1,800.00	1,797.55	1,797.30	3.91	1.06	-39.05	556.78	-451.72	716.98	712.02	4.96	144.435	
1,900.00	1,900.00	1,896.26	1,896.00	4.13	1.09	-39.00	557.45	-451.44	717.32	712.11	5.21	137.656	
2,000.00	2,000.00	1,995.01	1,994.75	4.36	1.11	-38.97	558.11	-451.44	717.85	712.39	5.46	131.517	
2,100.00	2,100.00	2,094.34	2,094.08	4.58	1.14	-38.94	558.83	-451.58	718.50	712.80	5.70	126.005	
2,200.00	2,200.00	2,193.73	2,193.47	4.81	1.16	-38.91	559.63	-451.76	719.24	713.29	5.95	120.941	
2,300.00	2,300.00	2,294.01	2,293.74	5.03	1.18	-38.88	560.47	-451.95	720.00	713.81	6.19	116.295	
2,400.00	2,400.00	2,394.28	2,394.01	5.26	1.21	-38.85	561.27	-452.11	720.73	714.29	6.44	111.937	
2,500.00	2,500.00	2,494.57	2,494.30	5.48	1.23	-38.83	561.98	-452.32	721.42	714.73	6.69	107.910	
2,600.00	2,600.00	2,594.95	2,594.68	5.71	1.26	-38.82	562.55	-452.65	722.06	715.13	6.93	104.177	
2,700.00	2,700.00	2,696.55	2,696.27	5.93	1.27	-38.84	562.83	-453.11	722.56	715.38	7.18	100.650	
2,800.00	2,800.00	2,797.99	2,797.72	6.15	1.29	-38.88	562.72	-453.70	722.84	715.42	7.43	97.329	
2,900.00	2,900.00	2,898.12	2,897.84	6.38	1.31	-38.94	562.40	-454.39	723.03	715.35	7.67	94.207	
3,000.00	3,000.00	2,998.20	2,997.92	6.60	1.33	-39.00	562.01	-455.14	723.19	715.27	7.92	91.283	
3,100.00	3,100.00	3,097.96	3,097.67	6.83	1.35	-39.08	561.56	-455.99	723.37	715.20	8.17	88.541	
3,200.00	3,200.00	3,197.63	3,197.33	7.05	1.37	-39.16	561.06	-456.93	723.59	715.17	8.42	85.969	
3,300.00	3,300.00	3,296.45	3,296.15	7.28	1.39	-39.25	560.59	-458.02	723.91	715.25	8.66	83.561	
3,400.00	3,400.00	3,395.32	3,395.01	7.50	1.41	-39.35	560.17	-459.30	724.40	715.49	8.91	81.307	
3,500.00	3,500.00	3,494.72	3,494.39	7.73	1.43	-39.48	559.62	-460.91	725.01	715.85	9.16	79.187	
3,600.00	3,600.00	3,593.95	3,593.61	7.95	1.45	-39.64	558.84	-462.94	725.70	716.30	9.40	77.189	
3,700.00	3,700.00	3,691.03	3,690.65	8.18	1.47	-39.81	558.13	-465.26	726.66	717.02	9.65	75.327	
3,800.00	3,800.00	3,788.00	3,787.59	8.40	1.49	-39.99	557.70	-467.84	728.03	718.14	9.89	73.600	
3,900.00	3,900.00	3,885.40	3,884.94	8.63	1.52	-40.18	557.47	-470.75	729.78	719.65	10.14	71.992	
4,000.00	4,000.00	3,982.68	3,982.17	8.85	1.54	-40.38	557.39	-474.05	731.91	721.53	10.38	70.498	
4,100.00	4,100.00	4,081.66	4,081.08	9.07	1.56	34.96	557.42	-477.66	733.59	722.97	10.62	69.094	
4,200.00	4,199.96	4,180.77	4,180.12	9.27	1.59	34.86	557.54	-481.35	733.96	723.11	10.84	67.690	
4,300.00	4,299.86	4,280.34	4,279.62	9.48	1.61	34.84	557.71	-485.14	732.99	721.92	11.07	66.209	
4,393.15	4,392.85	4,373.11	4,372.31	9.67	1.63	34.89	557.85	-488.77	730.85	719.56	11.28	64.765	
4,400.00	4,399.68	4,379.92	4,379.13	9.69	1.64	34.90	557.86	-489.04	730.64	719.34	11.30	64.656	
4,500.00	4,499.44	4,479.51	4,478.63	9.90	1.66	34.98	558.04	-492.98	727.73	716.20	11.53	63.108	
4,600.00	4,599.20	4,579.10	4,578.15	10.11	1.69	35.07	558.30	-496.90	724.87	713.11	11.76	61.617	
4,700.00	4,698.97	4,677.11	4,676.09	10.33	1.71	35.18	558.84	-500.65	722.16	710.16	12.00	60.193	
4,800.00	4,798.73	4,774.97	4,773.87	10.55	1.74	35.33	559.93	-504.20	719.74	707.51	12.23	58.841	
4,900.00	4,898.50	4,874.32	4,873.16	10.76	1.77	35.51	561.40	-507.66	717.53	705.07	12.47	57.544	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - OH (Actual)													Offset Site Error:	0.00 usft
Survey Program: 188- VES GyroFlex V2, 6335-LEAM MWD-ADJ, 11845-Project													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		
5,000.00	4,998.26	4,973.91	4,972.67	10.98	1.79	35.69	562.98	-511.10	715.39	702.68	12.71	56.293		
5,100.00	5,098.03	5,074.58	5,073.27	11.20	1.82	35.90	564.64	-514.47	713.23	700.28	12.95	55.079		
5,200.00	5,197.79	5,175.41	5,174.04	11.43	1.85	36.11	566.34	-517.60	710.96	697.77	13.19	53.895		
5,300.00	5,297.56	5,274.88	5,273.45	11.65	1.87	36.35	568.09	-520.54	708.66	695.22	13.43	52.750		
5,400.00	5,397.32	5,374.15	5,372.66	11.87	1.90	36.59	569.98	-523.45	706.46	692.78	13.68	51.650		
5,500.00	5,497.09	5,473.09	5,471.53	12.10	1.93	36.84	572.01	-526.34	704.39	690.46	13.92	50.593		
5,600.00	5,596.85	5,571.97	5,570.35	12.33	1.95	37.10	574.21	-529.24	702.48	688.31	14.17	49.581		
5,700.00	5,696.62	5,674.93	5,673.24	12.55	1.98	37.38	576.51	-532.10	700.49	686.07	14.42	48.586		
5,800.00	5,796.38	5,778.63	5,776.89	12.78	2.01	37.68	578.54	-534.45	697.98	683.31	14.67	47.584		
5,900.00	5,896.15	5,879.20	5,877.43	13.01	2.04	37.99	580.32	-536.41	695.16	680.24	14.92	46.598		
6,000.00	5,995.91	5,979.47	5,977.66	13.24	2.07	38.31	582.05	-538.33	692.29	677.13	15.17	45.640		
6,100.00	6,095.67	6,078.53	6,076.70	13.47	2.10	38.62	583.78	-540.24	689.48	674.06	15.42	44.716		
6,200.00	6,195.44	6,177.49	6,175.62	13.70	2.12	38.93	585.63	-542.21	686.82	671.15	15.67	43.828		
6,300.00	6,295.20	6,283.01	6,281.11	13.93	2.14	39.32	587.67	-543.69	683.88	667.97	15.91	42.974		
6,400.00	6,394.97	6,328.90	6,321.12	14.17	2.47	43.31	590.84	-502.63	670.07	653.69	16.38	40.904		
6,500.00	6,494.73	6,728.52	6,688.91	14.40	5.41	53.09	599.51	-396.41	641.07	622.28	18.79	34.118		
6,600.00	6,594.50	6,805.82	6,743.33	14.63	7.23	58.47	603.20	-341.73	609.46	588.44	21.02	29.000		
6,700.00	6,694.26	6,912.99	6,801.75	14.87	10.38	67.61	611.05	-252.57	584.79	560.03	24.76	23.619		
6,800.00	6,794.03	6,966.65	6,822.09	15.10	12.13	72.71	613.28	-203.01	570.18	543.01	27.17	20.982		
6,844.08	6,838.00	6,980.08	6,826.37	15.20	12.58	74.02	613.71	-190.28	568.60	540.83	27.78	20.472 CC, ES		
6,900.00	6,893.79	6,994.64	6,830.73	15.34	13.07	75.45	614.12	-176.40	571.17	542.90	28.28	20.201 SF		
7,000.00	6,993.56	7,016.76	6,836.94	15.57	13.82	77.62	614.66	-155.17	588.42	559.89	28.53	20.624		
7,100.00	7,093.32	7,031.99	6,840.95	15.81	14.34	79.12	614.98	-140.48	620.83	592.84	27.99	22.179		
7,200.00	7,193.09	7,042.26	6,843.44	16.04	14.69	80.13	615.23	-130.52	666.46	639.51	26.95	24.731		
7,300.00	7,292.85	7,057.00	6,846.69	16.28	15.20	81.57	615.65	-116.15	722.96	697.05	25.91	27.904		
7,400.00	7,392.62	7,057.00	6,846.69	16.52	15.20	81.57	615.65	-116.15	787.89	763.42	24.47	32.195		
7,500.00	7,492.38	7,057.00	6,846.69	16.76	15.20	81.57	615.65	-116.15	859.58	836.40	23.18	37.078		
7,600.00	7,592.15	7,067.85	6,848.84	16.99	15.57	82.63	616.01	-105.52	936.30	913.98	22.32	41.955		
7,615.05	7,607.16	7,068.50	6,848.96	17.03	15.59	82.70	616.04	-104.88	948.22	926.05	22.18	42.759		
7,700.00	7,691.95	7,072.13	6,849.62	17.21	15.72	84.22	616.18	-101.32	1,017.11	995.67	21.44	47.438		
7,800.00	7,791.85	7,076.40	6,850.36	17.40	15.86	86.18	616.35	-97.11	1,101.11	1,080.41	20.71	53.169		
7,900.00	7,891.81	7,088.00	6,852.21	17.58	16.26	89.01	616.87	-85.68	1,187.68	1,167.44	20.25	58.656		
8,008.20	8,000.00	7,088.00	6,852.21	17.78	16.26	15.54	616.87	-85.68	1,283.39	1,263.73	19.66	65.282		
8,100.00	8,091.80	7,088.00	6,852.21	17.96	16.26	15.54	616.87	-85.68	1,366.04	1,346.78	19.27	70.898		
8,200.00	8,191.80	7,088.00	6,852.21	18.17	16.26	15.54	616.87	-85.68	1,457.33	1,438.40	18.94	76.960		
8,300.00	8,291.80	7,095.09	6,853.19	18.39	16.51	16.20	617.21	-78.67	1,549.62	1,530.84	18.78	82.535		
8,328.31	8,320.11	7,095.86	6,853.29	18.45	16.53	16.27	617.25	-77.90	1,575.92	1,557.19	18.72	84.166		
8,350.00	8,341.80	7,096.51	6,853.38	18.49	16.55	-68.52	617.28	-77.25	1,596.07	1,577.38	18.69	85.412		
8,400.00	8,391.61	7,103.00	6,854.14	18.58	16.78	-57.41	617.60	-70.82	1,642.22	1,623.56	18.66	87.986		
8,450.00	8,440.89	7,103.00	6,854.14	18.65	16.78	-48.76	617.60	-70.82	1,687.62	1,669.05	18.57	90.885		
8,500.00	8,489.24	7,103.00	6,854.14	18.72	16.78	-41.88	617.60	-70.82	1,732.04	1,713.56	18.48	93.712		
8,550.00	8,536.31	7,103.00	6,854.14	18.78	16.78	-36.46	617.60	-70.82	1,775.24	1,756.83	18.41	96.443		
8,600.00	8,581.73	7,116.04	6,855.42	18.84	17.23	-31.90	618.27	-57.86	1,816.77	1,798.29	18.48	98.298		
8,650.00	8,625.16	7,129.00	6,856.38	18.91	17.67	-28.36	619.02	-44.96	1,856.65	1,838.09	18.56	100.028		
8,700.00	8,666.27	7,129.00	6,856.38	18.98	17.67	-25.74	619.02	-44.96	1,894.45	1,875.93	18.51	102.320		
8,750.00	8,704.75	7,129.00	6,856.38	19.07	17.67	-23.60	619.02	-44.96	1,930.18	1,911.70	18.49	104.414		
8,800.00	8,740.30	7,145.10	6,857.16	19.20	18.22	-21.74	620.03	-28.91	1,963.41	1,944.78	18.63	105.389		
8,850.00	8,772.65	7,160.00	6,857.47	19.36	18.73	-20.26	621.02	-14.05	1,994.25	1,975.47	18.78	106.209		
8,900.00	8,801.55	7,167.41	6,857.51	19.57	18.98	-19.09	621.53	-6.65	2,022.31	2,003.44	18.87	107.154		
8,950.00	8,826.79	7,200.43	6,857.59	19.85	20.12	-18.07	624.00	26.27	2,047.35	2,028.11	19.23	106.440		
9,000.00	8,848.18	7,280.05	6,858.67	20.18	22.87	-17.26	630.89	105.59	2,068.40	2,048.29	20.11	102.869		
9,050.00	8,865.55	7,336.36	6,860.25	20.59	24.85	-16.74	636.40	161.60	2,085.08	2,064.27	20.81	100.184		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - OH (Actual)													Offset Site Error:	0.00 usft
Survey Program: 188- VES GyroFlex V2, 6335-LEAM MWD-ADJ, 11845-Project													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		
13,800.00	8,961.76	11,845.00	7,039.89	55.64	185.46	-15.42	723.49	4,660.58	2,001.16	1,904.50	96.66	20.703		
13,900.00	8,963.26	11,845.00	7,039.89	56.65	185.46	-15.42	723.49	4,660.58	2,014.37	1,918.69	95.68	21.054		
14,000.00	8,964.76	11,845.00	7,039.89	57.67	185.46	-15.42	723.49	4,660.58	2,032.42	1,937.88	94.54	21.498		
14,100.00	8,966.26	11,845.00	7,039.89	58.69	185.46	-15.42	723.49	4,660.58	2,055.18	1,961.91	93.27	22.036		
14,200.00	8,967.76	11,845.00	7,039.89	59.71	185.46	-15.42	723.49	4,660.58	2,082.50	1,990.62	91.88	22.666		
14,211.82	8,967.94	11,845.00	7,039.89	59.83	185.46	-15.42	723.49	4,660.58	2,086.02	1,994.32	91.71	22.747		
14,300.00	8,969.26	11,845.00	7,039.89	60.73	185.46	-15.14	723.49	4,660.58	2,114.37	2,023.94	90.43	23.380		
14,400.00	8,970.77	11,845.00	7,039.89	61.76	185.46	-14.78	723.49	4,660.58	2,150.85	2,061.82	89.02	24.161		
14,500.00	8,972.28	11,845.00	7,039.89	62.80	185.46	-14.36	723.49	4,660.58	2,191.68	2,104.03	87.65	25.004		
14,600.00	8,973.79	11,845.00	7,039.89	63.84	185.46	-13.89	723.49	4,660.58	2,236.64	2,150.29	86.34	25.904		
14,700.00	8,975.30	11,845.00	7,039.89	64.88	185.46	-13.36	723.49	4,660.58	2,285.45	2,200.35	85.10	26.857		
14,765.09	8,976.29	11,845.00	7,039.89	65.56	185.46	-12.99	723.49	4,660.58	2,319.17	2,234.85	84.33	27.502		
14,800.00	8,976.82	11,845.00	7,039.89	65.92	185.46	-12.99	723.49	4,660.58	2,337.84	2,253.92	83.92	27.858		
14,900.00	8,978.33	11,845.00	7,039.89	66.97	185.46	-12.99	723.49	4,660.58	2,393.34	2,310.60	82.74	28.926		
15,000.00	8,979.85	11,845.00	7,039.89	68.02	185.46	-12.99	723.49	4,660.58	2,451.66	2,370.11	81.55	30.063		
15,100.00	8,981.36	11,845.00	7,039.89	69.08	185.46	-12.99	723.49	4,660.58	2,512.61	2,432.25	80.36	31.267		
15,200.00	8,982.88	11,845.00	7,039.89	70.13	185.46	-12.99	723.49	4,660.58	2,576.00	2,496.82	79.18	32.535		
15,300.00	8,984.39	11,845.00	7,039.89	71.19	185.46	-12.99	723.49	4,660.58	2,641.65	2,563.65	78.01	33.865		
15,400.00	8,985.91	11,845.00	7,039.89	72.25	185.46	-12.99	723.49	4,660.58	2,709.41	2,632.55	76.86	35.253		
15,500.00	8,987.42	11,845.00	7,039.89	73.31	185.46	-12.99	723.49	4,660.58	2,779.11	2,703.38	75.73	36.697		
15,600.00	8,988.94	11,845.00	7,039.89	74.37	185.46	-12.99	723.49	4,660.58	2,850.62	2,775.98	74.64	38.194		
15,700.00	8,990.45	11,845.00	7,039.89	75.44	185.46	-12.99	723.49	4,660.58	2,923.80	2,850.23	73.57	39.742		
15,800.00	8,991.97	11,845.00	7,039.89	76.50	185.46	-12.99	723.49	4,660.58	2,998.53	2,925.99	72.54	41.338		
15,900.00	8,993.48	11,845.00	7,039.89	77.57	185.46	-12.99	723.49	4,660.58	3,074.69	3,003.15	71.54	42.979		
16,000.00	8,995.00	11,845.00	7,039.89	78.64	185.46	-12.99	723.49	4,660.58	3,152.19	3,081.61	70.58	44.664		
16,100.00	8,996.51	11,845.00	7,039.89	79.71	185.46	-12.99	723.49	4,660.58	3,230.92	3,161.27	69.65	46.389		
16,200.00	8,998.03	11,845.00	7,039.89	80.78	185.46	-12.99	723.49	4,660.58	3,310.80	3,242.05	68.76	48.153		
16,300.00	8,999.54	11,845.00	7,039.89	81.85	185.46	-12.99	723.49	4,660.58	3,391.75	3,323.85	67.90	49.952		
16,400.00	9,001.06	11,845.00	7,039.89	82.93	185.46	-12.99	723.49	4,660.58	3,473.69	3,406.62	67.08	51.786		
16,500.00	9,002.57	11,845.00	7,039.89	84.00	185.46	-12.99	723.49	4,660.58	3,556.56	3,490.27	66.29	53.652		
16,528.18	9,003.00	11,845.00	7,039.89	84.30	185.46	-12.99	723.49	4,660.58	3,580.07	3,513.99	66.07	54.183		

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - Plan #1 - Draft #4													Offset Site Error: 0.00 usft
Survey Program: 188- VES GyroFlex V2, 6188-LEAM MWD-ADJ													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance		Minimum		Separation		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)	Separation (usft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-39.68	565.62	-469.19	734.89				
100.00	100.00	101.95	101.95	0.09	0.08	-39.70	565.31	-469.26	734.70	734.53	0.16	4,454.211	
200.00	200.00	204.38	204.38	0.31	0.17	-39.75	564.38	-469.45	734.12	733.65	0.47	1,547.738	
300.00	300.00	304.60	304.58	0.54	0.29	-39.83	563.23	-469.68	733.39	732.57	0.82	896.277	
400.00	400.00	404.99	404.97	0.76	0.40	-39.90	562.05	-469.90	732.62	731.47	1.15	634.676	
500.00	500.00	506.26	506.24	0.99	0.48	-39.97	560.78	-470.01	731.74	730.28	1.45	504.039	
600.00	600.00	608.02	607.98	1.21	0.55	-40.03	559.41	-469.95	730.67	728.92	1.75	418.166	
700.00	700.00	711.78	711.73	1.43	0.61	-40.06	558.03	-469.22	729.19	727.16	2.03	358.365	
800.00	800.00	814.86	814.79	1.66	0.67	-40.03	556.72	-467.60	727.21	724.90	2.32	313.595	
900.00	900.00	916.11	916.01	1.88	0.72	-39.93	555.75	-465.23	724.97	722.37	2.59	279.387	
1,000.00	1,000.00	1,015.96	1,015.81	2.11	0.77	-39.78	555.17	-462.20	722.58	719.71	2.87	251.526	
1,100.00	1,100.00	1,112.48	1,112.30	2.33	0.81	-39.64	554.78	-459.54	720.51	717.36	3.14	229.314	
1,200.00	1,200.00	1,209.00	1,208.79	2.56	0.86	-39.52	554.50	-457.46	718.91	715.50	3.41	210.771	
1,300.00	1,300.00	1,305.40	1,305.18	2.78	0.89	-39.42	554.50	-455.80	717.82	714.14	3.68	195.311	
1,400.00	1,400.00	1,402.15	1,401.92	3.01	0.93	-39.32	554.84	-454.47	717.22	713.28	3.94	182.073	
1,500.00	1,500.00	1,500.90	1,500.66	3.23	0.97	-39.23	555.29	-453.44	716.91	712.71	4.20	170.756	
1,600.00	1,600.00	1,599.68	1,599.44	3.46	1.00	-39.17	555.70	-452.74	716.78	712.32	4.46	160.818	
1,632.13	1,632.13	1,631.48	1,631.23	3.53	1.01	-39.15	555.83	-452.56	716.77	712.24	4.54	157.927	
1,700.00	1,700.00	1,698.63	1,698.38	3.68	1.03	-39.11	556.17	-452.20	716.81	712.10	4.71	152.160	
1,800.00	1,800.00	1,797.55	1,797.30	3.91	1.06	-39.05	556.78	-451.72	716.98	712.02	4.96	144.435	
1,900.00	1,900.00	1,896.26	1,896.00	4.13	1.09	-39.00	557.45	-451.44	717.32	712.11	5.21	137.656	
2,000.00	2,000.00	1,995.01	1,994.75	4.36	1.11	-38.97	558.11	-451.44	717.85	712.39	5.46	131.517	
2,100.00	2,100.00	2,094.34	2,094.08	4.58	1.14	-38.94	558.83	-451.58	718.50	712.80	5.70	126.005	
2,200.00	2,200.00	2,193.73	2,193.47	4.81	1.16	-38.91	559.63	-451.76	719.24	713.29	5.95	120.941	
2,300.00	2,300.00	2,294.01	2,293.74	5.03	1.18	-38.88	560.47	-451.95	720.00	713.81	6.19	116.295	
2,400.00	2,400.00	2,394.28	2,394.01	5.26	1.21	-38.85	561.27	-452.11	720.73	714.29	6.44	111.937	
2,500.00	2,500.00	2,494.57	2,494.30	5.48	1.23	-38.83	561.98	-452.32	721.42	714.73	6.69	107.910	
2,600.00	2,600.00	2,594.95	2,594.68	5.71	1.26	-38.82	562.55	-452.65	722.06	715.13	6.93	104.177	
2,700.00	2,700.00	2,696.55	2,696.27	5.93	1.27	-38.84	562.83	-453.11	722.56	715.38	7.18	100.650	
2,800.00	2,800.00	2,797.99	2,797.72	6.15	1.29	-38.88	562.72	-453.70	722.84	715.42	7.43	97.329	
2,900.00	2,900.00	2,898.12	2,897.84	6.38	1.31	-38.94	562.40	-454.39	723.03	715.35	7.67	94.207	
3,000.00	3,000.00	2,998.20	2,997.92	6.60	1.33	-39.00	562.01	-455.14	723.19	715.27	7.92	91.283	
3,100.00	3,100.00	3,097.96	3,097.67	6.83	1.35	-39.08	561.56	-455.99	723.37	715.20	8.17	88.541	
3,200.00	3,200.00	3,197.63	3,197.33	7.05	1.37	-39.16	561.06	-456.93	723.59	715.17	8.42	85.969	
3,300.00	3,300.00	3,296.45	3,296.15	7.28	1.39	-39.25	560.59	-458.02	723.91	715.25	8.66	83.561	
3,400.00	3,400.00	3,395.32	3,395.01	7.50	1.41	-39.35	560.17	-459.30	724.40	715.49	8.91	81.307	
3,500.00	3,500.00	3,494.72	3,494.39	7.73	1.43	-39.48	559.62	-460.91	725.01	715.85	9.16	79.187	
3,600.00	3,600.00	3,593.95	3,593.61	7.95	1.45	-39.64	558.84	-462.94	725.70	716.30	9.40	77.189	
3,700.00	3,700.00	3,691.03	3,690.65	8.18	1.47	-39.81	558.13	-465.26	726.66	717.02	9.65	75.327	
3,800.00	3,800.00	3,788.00	3,787.59	8.40	1.49	-39.99	557.70	-467.84	728.03	718.14	9.89	73.600	
3,900.00	3,900.00	3,885.40	3,884.94	8.63	1.52	-40.18	557.47	-470.75	729.78	719.65	10.14	71.992	
4,000.00	4,000.00	3,982.68	3,982.17	8.85	1.54	-40.38	557.39	-474.05	731.91	721.53	10.38	70.498	
4,100.00	4,100.00	4,081.66	4,081.08	9.07	1.56	-34.96	557.42	-477.66	733.59	722.97	10.62	69.094	
4,200.00	4,199.96	4,180.77	4,180.12	9.27	1.59	34.86	557.54	-481.35	733.96	723.11	10.84	67.690	
4,300.00	4,299.86	4,280.34	4,279.62	9.48	1.61	34.84	557.71	-485.14	732.99	721.92	11.07	66.209	
4,393.15	4,392.85	4,373.11	4,372.31	9.67	1.63	34.89	557.85	-488.77	730.85	719.56	11.28	64.765	
4,400.00	4,399.68	4,379.92	4,379.13	9.69	1.64	34.90	557.86	-489.04	730.64	719.34	11.30	64.656	
4,500.00	4,499.44	4,479.51	4,478.63	9.90	1.66	34.98	558.04	-492.98	727.73	716.20	11.53	63.108	
4,600.00	4,599.20	4,579.10	4,578.15	10.11	1.69	35.07	558.30	-496.90	724.87	713.11	11.76	61.617	
4,700.00	4,698.97	4,677.11	4,676.09	10.33	1.71	35.18	558.84	-500.65	722.16	710.16	12.00	60.193	
4,800.00	4,798.73	4,774.97	4,773.87	10.55	1.74	35.33	559.93	-504.20	719.74	707.51	12.23	58.841	
4,900.00	4,898.50	4,874.32	4,873.16	10.76	1.77	35.51	561.40	-507.66	717.53	705.07	12.47	57.544	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - Plan #1 - Draft #4

Survey Program: 188- VES GyroFlex V2, 6188-LEAM MWD-ADJ

Offset Site Error: 0.00 usft

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)			
5,000.00	4,998.26	4,973.91	4,972.67	10.98	1.79	35.69	562.98	-511.10	715.39	702.68	12.71	56.293	
5,100.00	5,098.03	5,074.58	5,073.27	11.20	1.82	35.90	564.64	-514.47	713.23	700.28	12.95	55.079	
5,200.00	5,197.79	5,175.41	5,174.04	11.43	1.85	36.11	566.34	-517.60	710.96	697.77	13.19	53.895	
5,300.00	5,297.56	5,274.88	5,273.45	11.65	1.87	36.35	568.09	-520.54	708.66	695.22	13.43	52.750	
5,400.00	5,397.32	5,374.15	5,372.66	11.87	1.90	36.59	569.98	-523.45	706.46	692.78	13.68	51.650	
5,500.00	5,497.09	5,473.09	5,471.53	12.10	1.93	36.84	572.01	-526.34	704.39	690.46	13.92	50.593	
5,600.00	5,596.85	5,571.97	5,570.35	12.33	1.95	37.10	574.21	-529.24	702.48	688.31	14.17	49.581	
5,700.00	5,696.62	5,674.93	5,673.24	12.55	1.98	37.38	576.51	-532.10	700.49	686.07	14.42	48.586	
5,800.00	5,796.38	5,778.63	5,776.89	12.78	2.01	37.68	578.54	-534.45	697.98	683.31	14.67	47.584	
5,900.00	5,896.15	5,879.20	5,877.43	13.01	2.04	37.99	580.32	-536.41	695.16	680.24	14.92	46.598	
6,000.00	5,995.91	5,979.47	5,977.66	13.24	2.07	38.31	582.05	-538.33	692.29	677.13	15.17	45.640	
6,100.00	6,095.67	6,078.53	6,076.70	13.47	2.10	38.62	583.78	-540.24	689.48	674.06	15.42	44.716	
6,200.00	6,195.44	6,177.49	6,175.62	13.70	2.12	38.93	585.63	-542.21	686.82	671.15	15.67	43.828	
6,300.00	6,295.20	6,277.29	6,275.38	13.93	2.13	39.25	587.56	-544.24	684.26	668.35	15.91	43.008	
6,400.00	6,394.97	6,377.18	6,375.23	14.17	2.16	39.58	589.50	-546.27	681.72	665.55	16.17	42.169	
6,500.00	6,494.73	6,482.39	6,482.36	14.40	3.60	47.75	603.11	-460.28	663.73	646.26	17.47	37.989	
6,600.00	6,594.50	6,584.96	6,584.96	14.63	7.17	58.23	615.14	-349.98	631.21	610.35	20.86	30.253	
6,700.00	6,694.26	6,684.74	6,684.74	14.87	9.49	64.82	621.77	-283.83	603.05	579.22	23.82	25.313	
6,800.00	6,794.03	6,784.66	6,784.66	15.10	10.91	68.84	625.65	-243.87	586.67	560.76	25.91	22.641	
6,859.08	6,852.97	6,840.41	6,838.72	15.24	11.50	70.51	627.23	-227.28	583.92	557.21	26.71	21.859 CC, ES	
6,900.00	6,893.79	6,884.42	6,884.42	15.34	11.83	71.46	628.12	-217.83	585.26	558.18	27.08	21.611	
7,000.00	6,993.56	7,009.45	6,993.56	15.57	12.47	73.28	629.82	-199.69	599.78	572.40	27.38	21.905	
7,100.00	7,093.32	7,025.00	6,993.56	15.81	13.00	74.77	631.22	-184.71	629.50	602.47	27.03	23.288	
7,200.00	7,193.09	7,033.73	6,993.56	16.04	13.30	75.61	632.00	-176.26	672.58	646.47	26.11	25.764	
7,300.00	7,292.85	7,041.92	6,993.56	16.28	13.58	76.40	632.74	-168.28	726.75	701.73	25.02	29.050	
7,400.00	7,392.62	7,050.00	6,993.56	16.52	13.85	77.17	633.46	-160.39	789.79	765.86	23.92	33.014	
7,500.00	7,492.38	7,050.00	6,993.56	16.76	13.85	77.17	633.46	-160.39	859.79	837.08	22.71	37.853	
7,600.00	7,592.15	7,058.44	6,993.56	16.99	14.14	77.98	634.22	-152.11	935.17	913.32	21.85	42.795	
7,615.05	7,607.16	7,059.06	6,993.56	17.03	14.16	78.04	634.27	-151.51	946.90	925.18	21.72	43.597	
7,700.00	7,691.95	7,062.50	6,993.56	17.21	14.28	79.48	634.58	-148.14	1,014.85	993.83	21.02	48.278	
7,800.00	7,791.85	7,066.52	6,993.56	17.40	14.42	81.35	634.94	-144.17	1,098.00	1,077.67	20.32	54.025	
7,900.00	7,891.81	7,075.00	6,993.56	17.58	14.71	83.81	635.69	-135.82	1,183.87	1,164.03	19.84	59.676	
8,008.20	8,000.00	7,075.00	6,993.56	17.78	14.71	10.29	635.69	-135.82	1,279.10	1,259.81	19.28	66.328	
8,100.00	8,091.80	7,075.00	6,993.56	17.96	14.71	10.29	635.69	-135.82	1,361.45	1,342.53	18.92	71.961	
8,200.00	8,191.80	7,075.00	6,993.56	18.17	14.71	10.29	635.69	-135.82	1,452.45	1,433.83	18.61	78.037	
8,300.00	8,291.80	7,084.76	6,993.56	18.39	15.04	11.20	636.56	-126.18	1,544.43	1,525.93	18.50	83.468	
8,328.31	8,320.11	7,085.56	6,993.56	18.45	15.07	11.28	636.63	-125.38	1,570.66	1,552.21	18.46	85.098	
8,350.00	8,341.80	7,086.26	6,993.56	18.49	15.10	-73.45	636.70	-124.69	1,590.77	1,572.35	18.42	86.343	
8,400.00	8,391.61	7,088.54	6,993.56	18.58	15.17	-62.21	636.90	-122.43	1,636.90	1,618.54	18.36	89.155	
8,450.00	8,440.89	7,100.00	6,993.56	18.65	15.57	-52.26	637.92	-111.07	1,682.54	1,664.13	18.41	91.394	
8,500.00	8,489.24	7,100.00	6,993.56	18.72	15.57	-44.87	637.92	-111.07	1,727.13	1,708.79	18.33	94.201	
8,550.00	8,536.31	7,100.00	6,993.56	18.78	15.57	-39.00	637.92	-111.07	1,770.58	1,752.31	18.27	96.907	
8,600.00	8,581.73	7,100.00	6,993.56	18.84	15.57	-34.35	637.92	-111.07	1,812.66	1,794.44	18.22	99.487	
8,650.00	8,625.16	7,111.61	6,993.56	18.91	15.96	-30.45	638.94	-99.54	1,852.98	1,834.68	18.30	101.263	
8,700.00	8,666.27	7,125.00	6,993.56	18.98	16.42	-27.35	640.12	-86.21	1,891.50	1,873.10	18.40	102.783	
8,750.00	8,704.75	7,125.00	6,993.56	19.07	16.42	-25.02	640.12	-86.21	1,927.81	1,909.42	18.39	104.828	
8,800.00	8,740.30	7,132.37	6,993.56	19.20	16.67	-23.06	640.77	-78.88	1,961.90	1,943.44	18.47	106.249	
8,850.00	8,772.65	7,142.11	6,993.56	19.36	17.00	-21.46	641.62	-69.17	1,993.55	1,974.97	18.58	107.294	
8,900.00	8,801.55	7,182.73	6,993.56	19.57	18.40	-20.04	645.16	-28.70	2,022.24	2,003.24	19.00	106.427	
8,950.00	8,826.79	7,225.71	6,993.56	19.85	19.88	-18.94	648.90	14.12	2,047.49	2,028.01	19.48	105.106	
9,000.00	8,848.18	7,270.72	6,993.56	20.18	21.46	-18.11	652.83	58.95	2,069.11	2,049.09	20.02	103.377	
9,050.00	8,865.55	7,317.41	6,993.56	20.59	23.10	-17.49	656.90	105.46	2,086.91	2,066.31	20.61	101.273	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - Plan #1 - Draft #4													Offset Site Error: 0.00 usft
Survey Program: 188- VES GyroFlex V2, 6188-LEAM MWD-ADJ													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	
9,100.00	8,878.76	7,365.43	6,865.00	21.06	24.80	-17.07	661.08	153.30	2,100.78	2,079.52	21.26	98.808	
9,150.00	8,887.72	7,414.42	6,865.00	21.60	26.54	-16.82	665.35	202.10	2,110.60	2,088.63	21.97	96.074	
9,200.00	8,892.37	7,464.00	6,865.00	22.20	28.32	-16.73	669.67	251.49	2,116.29	2,093.56	22.73	93.088	
9,219.71	8,893.00	7,483.62	6,865.00	22.45	29.02	-16.74	671.38	271.04	2,117.39	2,094.35	23.05	91.870	
9,300.00	8,894.21	7,563.60	6,865.00	23.72	31.90	-16.91	678.35	350.71	2,120.58	2,096.67	23.91	88.680	
9,400.00	8,895.71	7,663.20	6,865.00	23.80	35.50	-17.12	687.03	449.94	2,124.57	2,099.32	25.25	84.140	
9,500.00	8,897.21	7,762.81	6,865.00	23.88	39.11	-17.34	695.72	549.17	2,128.59	2,101.90	26.69	79.757	
9,600.00	8,898.71	7,862.42	6,865.00	23.96	42.74	-17.55	704.40	648.40	2,132.64	2,104.42	28.22	75.571	
9,700.00	8,900.21	7,979.40	6,865.00	24.04	47.00	-17.77	713.58	765.02	2,136.49	2,106.37	30.12	70.944	
9,800.00	8,901.71	8,090.42	6,865.00	24.14	51.06	-17.89	718.84	875.90	2,139.35	2,107.43	31.92	67.021	
9,900.00	8,903.21	8,190.31	6,865.00	24.26	54.71	-17.99	723.20	975.70	2,142.12	2,108.52	33.60	63.751	
10,000.00	8,904.72	8,290.20	6,865.00	24.50	58.37	-18.08	727.55	1,075.50	2,144.90	2,109.56	35.34	60.690	
10,100.00	8,906.22	8,411.07	6,865.84	24.88	62.79	-18.21	732.83	1,196.25	2,146.99	2,109.49	37.50	57.257	
10,200.00	8,907.72	8,639.53	6,874.05	25.32	71.17	-18.45	740.58	1,424.38	2,146.39	2,104.83	41.56	51.646	
10,300.00	8,909.22	8,739.37	6,880.67	25.80	74.83	-18.55	742.82	1,523.98	2,142.23	2,098.76	43.47	49.279	
10,400.00	8,910.72	8,839.22	6,887.29	26.33	78.50	-18.65	745.06	1,623.58	2,138.08	2,092.65	45.43	47.066	
10,500.00	8,912.22	8,939.06	6,893.91	26.89	82.17	-18.75	747.31	1,723.17	2,133.94	2,086.51	47.42	44.996	
10,600.00	8,913.72	9,038.90	6,900.53	27.49	85.84	-18.85	749.55	1,822.77	2,129.80	2,080.34	49.46	43.060	
10,700.00	8,915.22	9,138.74	6,907.16	28.12	89.51	-18.95	751.79	1,922.37	2,125.67	2,074.14	51.53	41.251	
10,800.00	8,916.72	9,228.66	6,912.56	28.77	92.82	-19.01	752.78	2,012.12	2,121.76	2,068.34	53.41	39.722	
10,900.00	8,918.22	9,327.75	6,917.68	29.46	96.45	-19.03	752.31	2,111.07	2,118.14	2,062.72	55.42	38.223	
11,000.00	8,919.72	9,427.69	6,922.83	30.17	100.13	-19.05	751.83	2,210.87	2,114.52	2,057.07	57.45	36.806	
11,100.00	8,921.23	9,527.62	6,927.99	30.91	103.80	-19.07	751.35	2,310.67	2,110.91	2,051.40	59.50	35.475	
11,200.00	8,922.73	9,627.55	6,933.14	31.67	107.47	-19.09	750.87	2,410.47	2,107.29	2,045.72	61.58	34.223	
11,300.00	8,924.23	9,727.48	6,938.30	32.45	111.15	-19.11	750.39	2,510.26	2,103.68	2,040.01	63.66	33.044	
11,400.00	8,925.73	9,827.41	6,943.45	33.25	114.82	-19.13	749.91	2,610.06	2,100.06	2,034.30	65.76	31.933	
11,500.00	8,927.23	9,927.35	6,948.61	34.06	118.50	-19.16	749.43	2,709.86	2,096.45	2,028.57	67.88	30.885	
11,600.00	8,928.73	10,027.28	6,953.76	34.90	122.18	-19.18	748.95	2,809.66	2,092.83	2,022.83	70.01	29.895	
11,700.00	8,930.23	10,127.21	6,958.92	35.75	125.85	-19.20	748.47	2,909.46	2,089.22	2,017.07	72.15	28.958	
11,800.00	8,931.73	10,227.14	6,964.07	36.61	129.53	-19.22	747.99	3,009.25	2,085.61	2,011.31	74.30	28.071	
11,900.00	8,933.23	10,327.07	6,969.23	37.49	133.21	-19.24	747.51	3,109.05	2,081.99	2,005.53	76.46	27.230	
11,937.88	8,933.80	10,364.93	6,971.18	37.82	134.60	-19.25	747.33	3,146.86	2,080.62	2,003.34	77.28	26.923	
12,000.00	8,934.73	10,427.00	6,974.38	38.38	136.89	-19.22	747.03	3,208.85	2,078.27	1,999.66	78.61	26.437	
12,100.00	8,936.24	10,526.90	6,979.54	39.28	140.56	-19.13	746.55	3,308.61	2,074.01	1,993.33	80.68	25.706	
12,200.00	8,937.74	10,626.75	6,984.69	40.19	144.24	-19.00	746.07	3,408.32	2,069.19	1,986.54	82.65	25.035	
12,300.00	8,939.24	10,726.51	6,989.83	41.11	147.91	-18.81	745.59	3,507.95	2,063.80	1,979.29	84.52	24.419	
12,400.00	8,940.74	10,826.14	6,994.97	42.03	151.58	-18.57	745.11	3,607.45	2,057.87	1,971.61	86.27	23.855	
12,491.82	8,942.12	10,917.50	6,999.69	42.89	154.95	-18.30	744.67	3,698.69	2,051.95	1,964.19	87.76	23.381	
12,500.00	8,942.24	10,925.63	7,000.11	42.96	155.25	-18.28	744.63	3,706.81	2,051.41	1,963.52	87.89	23.341	
12,600.00	8,943.75	11,025.05	7,005.23	43.90	158.91	-18.05	744.16	3,806.09	2,044.75	1,955.30	89.45	22.860	
12,700.00	8,945.25	11,124.47	7,010.36	44.84	162.57	-17.81	743.68	3,905.38	2,038.12	1,947.14	90.98	22.402	
12,800.00	8,946.75	11,223.89	7,015.49	45.80	166.23	-17.57	743.20	4,004.66	2,031.53	1,939.04	92.49	21.965	
12,900.00	8,948.25	11,323.31	7,020.62	46.76	169.89	-17.33	742.72	4,103.95	2,024.97	1,930.99	93.98	21.548	
13,000.00	8,949.75	11,422.73	7,025.75	47.72	173.55	-17.09	742.24	4,203.23	2,018.45	1,923.01	95.44	21.149	
13,100.00	8,951.25	11,522.15	7,030.88	48.70	177.22	-16.84	741.77	4,302.52	2,011.97	1,915.09	96.87	20.769	
13,200.00	8,952.75	11,621.57	7,036.01	49.67	180.88	-16.60	741.29	4,401.81	2,005.52	1,907.23	98.29	20.405	
13,300.00	8,954.25	11,720.99	7,041.13	50.66	184.54	-16.35	740.81	4,501.09	1,999.11	1,899.43	99.68	20.056	
13,400.00	8,955.75	11,820.40	7,046.26	51.65	187.96	-16.10	740.33	4,600.38	1,992.74	1,891.80	100.94	19.742	
13,500.00	8,957.25	11,892.85	7,050.00	52.64	189.76	-15.92	739.99	4,672.73	1,986.58	1,885.11	101.48	19.576 SF	
13,598.63	8,958.73	11,892.85	7,050.00	53.62	189.76	-15.92	739.99	4,672.73	1,984.13	1,883.07	101.07	19.632	
13,600.00	8,958.75	11,892.85	7,050.00	53.64	189.76	-15.92	739.99	4,672.73	1,984.13	1,883.07	101.06	19.633	
13,700.00	8,960.26	11,892.85	7,050.00	54.64	189.76	-15.92	739.99	4,672.73	1,986.72	1,886.26	100.46	19.777	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design ONYX PWU - 7H - OH - Plan #1 - Draft #4														Offset Site Error:	0.00 usft
Survey Program: 188- VES GyroFlex V2, 6188-LEAM MWD-ADJ														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)					
13,800.00	8,961.76	11,892.85	7,050.00	55.64	189.76	-15.92	739.99	4,672.73	1,994.33	1,894.65	99.67	20.008			
13,900.00	8,963.26	11,892.85	7,050.00	56.65	189.76	-15.92	739.99	4,672.73	2,006.89	1,908.17	98.72	20.329			
14,000.00	8,964.76	11,892.85	7,050.00	57.67	189.76	-15.92	739.99	4,672.73	2,024.32	1,926.71	97.61	20.738			
14,100.00	8,966.26	11,892.85	7,050.00	58.69	189.76	-15.92	739.99	4,672.73	2,046.50	1,950.13	96.37	21.237			
14,200.00	8,967.76	11,892.85	7,050.00	59.71	189.76	-15.92	739.99	4,672.73	2,073.27	1,978.27	95.00	21.825			
14,211.82	8,967.94	11,892.85	7,050.00	59.83	189.76	-15.92	739.99	4,672.73	2,076.73	1,981.90	94.83	21.900			
14,300.00	8,969.26	11,892.85	7,050.00	60.73	189.76	-15.65	739.99	4,672.73	2,104.62	2,011.05	93.57	22.492			
14,400.00	8,970.77	11,892.85	7,050.00	61.76	189.76	-15.29	739.99	4,672.73	2,140.64	2,048.45	92.18	23.221			
14,500.00	8,972.28	11,892.85	7,050.00	62.80	189.76	-14.88	739.99	4,672.73	2,181.06	2,090.22	90.84	24.009			
14,600.00	8,973.79	11,892.85	7,050.00	63.84	189.76	-14.41	739.99	4,672.73	2,225.65	2,136.09	89.56	24.852			
14,700.00	8,975.30	11,892.85	7,050.00	64.88	189.76	-13.89	739.99	4,672.73	2,274.14	2,185.80	88.34	25.743			
14,765.09	8,976.29	11,892.85	7,050.00	65.56	189.76	-13.52	739.99	4,672.73	2,307.68	2,220.09	87.59	26.347			
14,800.00	8,976.82	11,892.85	7,050.00	65.92	189.76	-13.52	739.99	4,672.73	2,326.26	2,239.07	87.19	26.680			
14,900.00	8,978.33	11,892.85	7,050.00	66.97	189.76	-13.52	739.99	4,672.73	2,381.51	2,295.47	86.04	27.678			
15,000.00	8,979.85	11,892.85	7,050.00	68.02	189.76	-13.52	739.99	4,672.73	2,439.61	2,354.73	84.88	28.741			
15,100.00	8,981.36	11,892.85	7,050.00	69.08	189.76	-13.52	739.99	4,672.73	2,500.36	2,416.64	83.72	29.866			
15,200.00	8,982.88	11,892.85	7,050.00	70.13	189.76	-13.52	739.99	4,672.73	2,563.57	2,481.01	82.56	31.049			
15,300.00	8,984.39	11,892.85	7,050.00	71.19	189.76	-13.52	739.99	4,672.73	2,629.07	2,547.64	81.42	32.288			
15,400.00	8,985.91	11,892.85	7,050.00	72.25	189.76	-13.52	739.99	4,672.73	2,696.69	2,616.38	80.31	33.580			
15,500.00	8,987.42	11,892.85	7,050.00	73.31	189.76	-13.52	739.99	4,672.73	2,766.26	2,687.05	79.21	34.922			
15,600.00	8,988.94	11,892.85	7,050.00	74.37	189.76	-13.52	739.99	4,672.73	2,837.66	2,759.51	78.15	36.311			
15,700.00	8,990.45	11,892.85	7,050.00	75.44	189.76	-13.52	739.99	4,672.73	2,910.74	2,833.63	77.12	37.745			
15,800.00	8,991.97	11,892.85	7,050.00	76.50	189.76	-13.52	739.99	4,672.73	2,985.39	2,909.27	76.12	39.220			
15,900.00	8,993.48	11,892.85	7,050.00	77.57	189.76	-13.52	739.99	4,672.73	3,061.48	2,986.32	75.16	40.735			
16,000.00	8,995.00	11,892.85	7,050.00	78.64	189.76	-13.52	739.99	4,672.73	3,138.91	3,064.68	74.23	42.286			
16,100.00	8,996.51	11,892.85	7,050.00	79.71	189.76	-13.52	739.99	4,672.73	3,217.58	3,144.24	73.34	43.871			
16,200.00	8,998.03	11,892.85	7,050.00	80.78	189.76	-13.52	739.99	4,672.73	3,297.41	3,224.92	72.49	45.488			
16,300.00	8,999.54	11,892.85	7,050.00	81.85	189.76	-13.52	739.99	4,672.73	3,378.32	3,306.65	71.67	47.134			
16,400.00	9,001.06	11,892.85	7,050.00	82.93	189.76	-13.52	739.99	4,672.73	3,460.22	3,389.33	70.90	48.808			
16,500.00	9,002.57	11,892.85	7,050.00	84.00	189.76	-13.52	739.99	4,672.73	3,543.06	3,472.91	70.15	50.506			
16,528.18	9,003.00	11,892.85	7,050.00	84.30	189.76	-13.52	739.99	4,672.73	3,566.56	3,496.61	69.95	50.989			

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - 12H - OH - Plan #2													Offset Site Error:	0.00 usft
Survey Program: D-LEAM MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset		+N/S (usft)	+E/W (usft)						
0.00	0.00	0.50	0.50	0.00	0.00	90.02	-0.01	29.99	29.99					
100.00	100.00	100.50	100.50	0.09	0.09	90.02	-0.01	29.99	29.99	29.82	0.17	173.282		
200.00	200.00	200.50	200.50	0.31	0.31	90.02	-0.01	29.99	29.99	29.37	0.62	48.169		
300.00	300.00	300.50	300.50	0.54	0.54	90.02	-0.01	29.99	29.99	28.92	1.07	27.972		
400.00	400.00	400.50	400.50	0.76	0.76	90.02	-0.01	29.99	29.99	28.47	1.52	19.709		
500.00	500.00	500.50	500.50	0.99	0.99	90.02	-0.01	29.99	29.99	28.02	1.97	15.214		
600.00	600.00	600.50	600.50	1.21	1.21	90.02	-0.01	29.99	29.99	27.57	2.42	12.389		
700.00	700.00	700.50	700.50	1.43	1.44	90.02	-0.01	29.99	29.99	27.12	2.87	10.449		
800.00	800.00	800.50	800.50	1.66	1.66	90.02	-0.01	29.99	29.99	26.67	3.32	9.034		
900.00	900.00	900.50	900.50	1.88	1.89	90.02	-0.01	29.99	29.99	26.22	3.77	7.956		
1,000.00	1,000.00	1,000.50	1,000.50	2.11	2.11	90.02	-0.01	29.99	29.99	25.77	4.22	7.109		
1,100.00	1,100.00	1,100.50	1,100.50	2.33	2.33	90.02	-0.01	29.99	29.99	25.32	4.67	6.424		
1,200.00	1,200.00	1,200.50	1,200.50	2.56	2.56	90.02	-0.01	29.99	29.99	24.87	5.12	5.860		
1,300.00	1,300.00	1,300.50	1,300.50	2.78	2.78	90.02	-0.01	29.99	29.99	24.42	5.57	5.387		
1,400.00	1,400.00	1,400.50	1,400.50	3.01	3.01	90.02	-0.01	29.99	29.99	23.97	6.02	4.984		
1,500.00	1,500.00	1,500.50	1,500.50	3.23	3.23	90.02	-0.01	29.99	29.99	23.52	6.47	4.638		
1,600.00	1,600.00	1,600.50	1,600.50	3.46	3.46	90.02	-0.01	29.99	29.99	23.07	6.92	4.336		
1,700.00	1,700.00	1,700.64	1,700.63	3.68	3.65	91.65	-0.86	29.74	29.76	22.42	7.34	4.056		
1,800.00	1,800.00	1,800.71	1,800.67	3.91	3.83	96.66	-3.39	29.02	29.21	21.48	7.73	3.777		
1,900.00	1,900.00	1,900.66	1,900.52	4.13	4.01	105.26	-7.59	27.80	28.82	20.68	8.14	3.542		
1,907.94	1,907.94	1,908.59	1,908.44	4.15	4.02	106.10	-7.99	27.69	28.82	20.65	8.17	3.528 CC, ES		
2,000.00	2,000.00	2,000.43	2,000.10	4.36	4.19	117.25	-13.45	26.11	29.37	20.83	8.55	3.437 SF		
2,100.00	2,100.00	2,100.00	2,099.37	4.58	4.38	131.20	-20.96	23.94	31.84	22.88	8.96	3.554		
2,200.00	2,200.00	2,199.18	2,198.09	4.81	4.58	144.69	-30.08	21.31	36.94	27.58	9.37	3.943		
2,300.00	2,300.00	2,298.04	2,296.32	5.03	4.79	155.95	-40.81	18.21	44.89	35.11	9.78	4.592		
2,400.00	2,400.00	2,396.49	2,393.93	5.26	5.01	164.57	-53.11	14.66	55.49	45.31	10.18	5.452		
2,500.00	2,500.00	2,494.47	2,490.84	5.48	5.25	170.95	-66.95	10.66	68.48	57.90	10.58	6.474		
2,600.00	2,600.00	2,592.13	2,587.19	5.71	5.49	175.67	-82.31	6.23	83.62	72.63	10.98	7.614		
2,700.00	2,700.00	2,690.68	2,684.31	5.93	5.76	179.07	-98.37	1.59	99.71	88.30	11.41	8.740		
2,800.00	2,800.00	2,789.23	2,781.43	6.15	6.03	-178.48	-114.44	-3.04	116.05	104.21	11.84	9.802		
2,900.00	2,900.00	2,887.78	2,878.55	6.38	6.31	-176.63	-130.50	-7.68	132.55	120.28	12.27	10.799		
3,000.00	3,000.00	2,986.34	2,975.68	6.60	6.60	-175.20	-146.56	-12.32	149.16	136.44	12.71	11.733		
3,100.00	3,100.00	3,084.89	3,072.80	6.83	6.89	-174.05	-162.62	-16.95	165.83	152.68	13.15	12.607		
3,200.00	3,200.00	3,183.44	3,169.92	7.05	7.19	-173.11	-178.68	-21.59	182.56	168.96	13.60	13.426		
3,300.00	3,300.00	3,281.99	3,267.04	7.28	7.49	-172.33	-194.74	-26.22	199.33	185.29	14.04	14.194		
3,400.00	3,400.00	3,380.54	3,364.17	7.50	7.80	-171.67	-210.80	-30.86	216.13	201.64	14.49	14.915		
3,500.00	3,500.00	3,479.09	3,461.29	7.73	8.11	-171.11	-226.87	-35.50	232.95	218.01	14.94	15.592		
3,600.00	3,600.00	3,577.64	3,558.41	7.95	8.43	-170.62	-242.93	-40.13	249.79	234.40	15.39	16.230		
3,700.00	3,700.00	3,676.19	3,655.53	8.18	8.75	-170.19	-258.99	-44.77	266.65	250.80	15.84	16.830		
3,800.00	3,800.00	3,774.74	3,752.66	8.40	9.07	-169.82	-275.05	-49.41	283.52	267.22	16.30	17.397		
3,900.00	3,900.00	3,873.29	3,849.78	8.63	9.39	-169.48	-291.11	-54.04	300.40	283.65	16.75	17.932		
4,000.00	4,000.00	3,971.84	3,946.90	8.85	9.72	-169.18	-307.17	-58.68	317.29	300.08	17.21	18.438		
4,100.00	4,100.00	4,070.39	4,044.02	9.07	10.04	-93.38	-323.23	-63.32	334.23	316.58	17.66	18.931		
4,200.00	4,199.96	4,168.92	4,141.12	9.27	10.37	-93.39	-339.29	-67.95	351.29	333.19	18.10	19.412		
4,300.00	4,299.86	4,267.40	4,238.17	9.48	10.70	-93.65	-355.34	-72.59	368.45	349.91	18.54	19.872		
4,393.15	4,392.85	4,359.06	4,328.51	9.67	11.01	-94.10	-370.28	-76.90	384.57	365.61	18.96	20.283		
4,400.00	4,399.68	4,365.79	4,335.14	9.69	11.03	-94.15	-371.38	-77.22	385.76	366.77	18.99	20.313		
4,500.00	4,499.44	4,464.15	4,432.07	9.90	11.37	-94.87	-387.41	-81.84	403.18	383.73	19.45	20.734		
4,600.00	4,599.20	4,562.50	4,528.99	10.11	11.70	-95.52	-403.43	-86.47	420.65	400.75	19.90	21.136		
4,700.00	4,698.97	4,660.85	4,625.92	10.33	12.04	-96.13	-419.46	-91.10	438.18	417.82	20.36	21.519		
4,800.00	4,798.73	4,759.20	4,722.85	10.55	12.37	-96.68	-435.49	-95.72	455.75	434.92	20.83	21.884		
4,900.00	4,898.50	4,857.55	4,819.77	10.76	12.71	-97.20	-451.52	-100.35	473.35	452.06	21.29	22.233		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - 12H - OH - Plan #2														Offset Site Error: 0.00 usft
Survey Program: O-LEAM 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		
5,000.00	4,998.26	4,955.90	4,916.70	10.98	13.05	-97.68	-467.55	-104.98	490.99	469.24	21.76	22.566		
5,100.00	5,098.03	5,054.26	5,013.63	11.20	13.39	-98.12	-483.58	-109.61	508.67	486.44	22.23	22.885		
5,200.00	5,197.79	5,152.61	5,110.55	11.43	13.73	-98.54	-499.61	-114.23	526.36	503.67	22.70	23.189		
5,300.00	5,297.56	5,250.96	5,207.48	11.65	14.07	-98.93	-515.64	-118.86	544.09	520.92	23.17	23.480		
5,400.00	5,397.32	5,349.31	5,304.41	11.87	14.41	-99.29	-531.67	-123.49	561.84	538.19	23.65	23.759		
5,500.00	5,497.09	5,447.66	5,401.33	12.10	14.75	-99.63	-547.69	-128.11	579.60	555.48	24.12	24.026		
5,600.00	5,596.85	5,546.01	5,498.26	12.33	15.09	-99.95	-563.72	-132.74	597.39	572.79	24.60	24.282		
5,700.00	5,696.62	5,644.37	5,595.19	12.55	15.43	-100.26	-579.75	-137.37	615.20	590.11	25.08	24.527		
5,800.00	5,796.38	5,742.72	5,692.11	12.78	15.78	-100.54	-595.78	-142.00	633.02	607.45	25.56	24.762		
5,900.00	5,896.15	5,841.07	5,789.04	13.01	16.12	-100.81	-611.81	-146.62	650.85	624.80	26.05	24.988		
6,000.00	5,995.91	5,939.42	5,885.97	13.24	16.46	-101.07	-627.84	-151.25	668.70	642.17	26.53	25.206		
6,100.00	6,095.67	6,037.77	5,982.89	13.47	16.81	-101.31	-643.87	-155.88	686.56	659.54	27.01	25.414		
6,200.00	6,195.44	6,136.13	6,079.82	13.70	17.15	-101.54	-659.90	-160.50	704.43	676.93	27.50	25.615		
6,300.00	6,295.20	6,234.48	6,176.74	13.93	17.50	-101.76	-675.93	-165.13	722.31	694.32	27.99	25.808		
6,400.00	6,394.97	6,332.83	6,273.67	14.17	17.84	-101.97	-691.95	-169.76	740.20	711.72	28.48	25.994		
6,500.00	6,494.73	6,431.18	6,370.60	14.40	18.19	-102.17	-707.98	-174.39	758.10	729.13	28.96	26.173		
6,600.00	6,594.50	6,529.53	6,467.52	14.63	18.53	-102.36	-724.01	-179.01	776.01	746.55	29.45	26.346		
6,700.00	6,694.26	6,627.88	6,564.45	14.87	18.88	-102.54	-740.04	-183.64	793.92	763.98	29.95	26.512		
6,800.00	6,794.03	6,726.24	6,661.38	15.10	19.23	-102.71	-756.07	-188.27	811.85	781.41	30.44	26.673		
6,900.00	6,893.79	6,824.59	6,758.30	15.34	19.57	-102.87	-772.10	-192.89	829.78	798.85	30.93	26.828		
7,000.00	6,993.56	6,922.94	6,855.23	15.57	19.92	-103.03	-788.13	-197.52	847.72	816.29	31.42	26.978		
7,100.00	7,093.32	7,021.29	6,952.16	15.81	20.27	-103.18	-804.16	-202.15	865.66	833.74	31.92	27.122		
7,200.00	7,193.09	7,119.64	7,049.08	16.04	20.61	-103.33	-820.19	-206.78	883.61	851.20	32.41	27.262		
7,300.00	7,292.85	7,217.99	7,148.01	16.28	20.96	-103.47	-836.22	-211.40	901.56	868.65	32.91	27.398		
7,400.00	7,392.62	7,332.07	7,258.58	16.52	21.30	-103.64	-853.95	-216.52	919.78	885.32	33.46	27.456		
7,500.00	7,492.38	7,449.06	7,374.38	16.76	21.58	-103.85	-869.91	-221.13	938.09	900.09	34.00	27.470		
7,600.00	7,592.15	7,566.67	7,491.12	16.99	21.85	-104.09	-883.66	-225.10	947.47	912.94	34.53	27.438		
7,615.05	7,607.16	7,584.42	7,508.76	17.03	21.89	-104.13	-885.54	-225.64	949.31	914.70	34.61	27.429		
7,700.00	7,691.95	7,684.87	7,608.71	17.21	22.10	-104.41	-895.16	-228.42	958.74	923.71	35.02	27.374		
7,800.00	7,791.85	7,803.61	7,727.06	17.40	22.34	-104.65	-904.36	-231.08	967.61	932.15	35.47	27.283		
7,900.00	7,891.81	7,922.77	7,846.00	17.58	22.56	-104.78	-911.22	-233.06	974.07	938.18	35.88	27.144		
8,008.20	8,000.00	8,052.00	7,975.14	17.78	22.77	179.67	-915.98	-234.43	978.30	941.99	36.31	26.943		
8,100.00	8,091.80	8,161.79	8,084.90	17.96	22.95	179.71	-917.82	-234.96	979.84	943.16	36.68	26.716		
8,200.00	8,191.80	8,269.19	8,192.30	18.17	23.12	179.71	-917.99	-235.01	979.98	942.90	37.08	26.427		
8,300.00	8,291.80	8,369.19	8,292.30	18.39	23.27	179.71	-917.99	-235.01	979.98	942.50	37.48	26.148		
8,328.31	8,320.11	8,397.50	8,320.61	18.45	23.31	179.71	-917.99	-235.01	979.98	942.39	37.59	26.071		
8,350.00	8,341.80	8,419.18	8,342.30	18.49	23.34	89.73	-917.99	-235.01	979.98	942.31	37.67	26.015		
8,400.00	8,391.61	8,469.00	8,392.11	18.58	23.41	89.97	-917.99	-235.01	979.97	942.14	37.83	25.903		
8,403.98	8,395.56	8,472.95	8,396.06	18.58	23.42	90.00	-917.99	-235.01	979.97	942.13	37.84	25.895		
8,450.00	8,440.89	8,518.42	8,441.53	18.65	23.48	90.45	-917.99	-234.92	980.00	942.03	37.97	25.808		
8,500.00	8,489.24	8,568.58	8,491.58	18.72	23.55	91.00	-917.99	-231.81	980.13	942.03	38.10	25.728		
8,550.00	8,536.31	8,619.64	8,542.05	18.78	23.61	91.55	-917.99	-224.17	980.34	942.14	38.20	25.661		
8,600.00	8,581.73	8,671.62	8,592.52	18.84	23.66	92.10	-917.99	-211.80	980.65	942.35	38.30	25.606		
8,650.00	8,625.16	8,724.56	8,642.55	18.91	23.70	92.63	-917.99	-194.56	981.04	942.65	38.39	25.555		
8,700.00	8,666.27	8,778.48	8,691.66	18.98	23.73	93.15	-917.99	-172.34	981.50	943.01	38.49	25.502		
8,750.00	8,704.75	8,833.40	8,739.30	19.07	23.76	93.64	-917.99	-145.06	982.01	943.41	38.60	25.438		
8,800.00	8,740.30	8,889.31	8,784.89	19.20	23.78	94.12	-917.99	-112.73	982.57	943.81	38.76	25.349		
8,850.00	8,772.65	8,946.21	8,827.83	19.36	23.79	94.56	-917.99	-75.44	983.15	944.17	38.98	25.223		
8,900.00	8,801.55	9,004.06	8,867.48	19.57	23.80	94.97	-917.99	-33.34	983.73	944.44	39.28	25.042		
8,950.00	8,826.79	9,062.80	8,903.19	19.85	23.81	95.33	-917.99	13.27	984.29	944.59	39.70	24.791		
9,000.00	8,848.18	9,122.37	8,934.33	20.18	23.83	95.65	-917.99	64.02	984.81	944.55	40.26	24.459		
9,050.00	8,865.55	9,182.68	8,960.33	20.59	23.85	95.93	-917.99	118.40	985.27	944.30	40.97	24.047		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - 12H - OH - Plan #2											Offset Site Error: 0.00 usft		
Survey Program: D-LEAM 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
9,100.00	8,878.76	9,243.60	8,980.64	21.06	23.91	96.14	-917.99	175.81	985.65	943.79	41.86	23.546	
9,150.00	8,887.72	9,305.01	8,994.83	21.60	24.01	96.30	-917.99	235.52	985.94	943.02	42.92	22.970	
9,200.00	8,892.37	9,366.76	9,002.58	22.20	24.21	96.40	-917.99	296.75	986.12	941.97	44.15	22.335	
9,219.71	8,893.00	9,391.15	9,003.81	22.45	24.34	96.42	-917.99	321.12	986.16	941.49	44.67	22.075	
9,300.00	8,894.21	9,473.16	9,005.02	23.72	24.98	96.42	-917.99	403.11	986.16	939.88	46.28	21.308	
9,400.00	8,895.71	9,573.16	9,006.40	23.80	26.20	96.42	-917.99	503.10	986.15	938.34	47.81	20.627	
9,500.00	8,897.21	9,673.16	9,007.79	23.88	27.74	96.41	-917.99	603.09	986.13	936.57	49.57	19.894	
9,600.00	8,898.71	9,773.16	9,009.17	23.96	29.47	96.40	-917.99	703.08	986.12	934.59	51.53	19.137	
9,700.00	8,900.21	9,873.16	9,010.55	24.04	31.34	96.40	-917.99	803.07	986.11	932.45	53.66	18.376	
9,800.00	8,901.71	9,973.16	9,011.94	24.14	33.33	96.39	-917.99	903.06	986.10	930.15	55.95	17.626	
9,900.00	8,903.21	10,073.16	9,013.32	24.26	35.41	96.38	-917.99	1,003.05	986.08	927.72	58.36	16.896	
10,000.00	8,904.72	10,173.16	9,014.71	24.50	37.55	96.38	-917.99	1,103.04	986.07	925.18	60.89	16.194	
10,100.00	8,906.22	10,273.16	9,016.09	24.88	39.76	96.37	-917.99	1,203.04	986.06	922.54	63.52	15.524	
10,200.00	8,907.72	10,373.16	9,017.48	25.32	42.02	96.36	-917.99	1,303.03	986.04	919.80	66.24	14.886	
10,300.00	8,909.22	10,473.16	9,018.86	25.80	44.32	96.36	-917.99	1,403.02	986.03	916.99	69.04	14.282	
10,400.00	8,910.72	10,573.16	9,020.25	26.33	46.65	96.35	-917.99	1,503.01	986.02	914.10	71.92	13.711	
10,500.00	8,912.22	10,673.16	9,021.63	26.89	49.02	96.34	-917.99	1,603.00	986.00	911.15	74.85	13.172	
10,600.00	8,913.72	10,773.16	9,023.02	27.49	51.41	96.34	-917.99	1,702.99	985.99	908.14	77.85	12.665	
10,700.00	8,915.22	10,873.16	9,024.40	28.12	53.82	96.33	-917.99	1,802.98	985.98	905.08	80.90	12.188	
10,800.00	8,916.72	10,973.16	9,025.79	28.77	56.26	96.32	-917.99	1,902.97	985.97	901.97	84.00	11.738	
10,900.00	8,918.22	11,073.16	9,027.17	29.46	58.71	96.32	-917.99	2,002.96	985.95	898.81	87.14	11.314	
11,000.00	8,919.72	11,173.16	9,028.56	30.17	61.18	96.31	-917.99	2,102.95	985.94	895.62	90.32	10.916	
11,100.00	8,921.23	11,273.16	9,029.94	30.91	63.66	96.30	-917.99	2,202.94	985.93	892.39	93.54	10.540	
11,200.00	8,922.73	11,373.16	9,031.33	31.67	66.15	96.30	-917.99	2,302.93	985.92	889.12	96.79	10.186	
11,300.00	8,924.23	11,473.16	9,032.71	32.45	68.66	96.29	-917.99	2,402.92	985.90	885.83	100.08	9.851	
11,400.00	8,925.73	11,573.16	9,034.10	33.25	71.17	96.28	-917.99	2,502.91	985.89	882.50	103.39	9.536	
11,500.00	8,927.23	11,673.16	9,035.48	34.06	73.69	96.28	-917.99	2,602.90	985.88	879.15	106.73	9.237	
11,600.00	8,928.73	11,773.16	9,036.87	34.90	76.22	96.27	-917.99	2,702.89	985.86	875.78	110.09	8.955	
11,700.00	8,930.23	11,873.16	9,038.25	35.75	78.76	96.26	-917.99	2,802.88	985.85	872.38	113.47	8.688	
11,800.00	8,931.73	11,973.16	9,039.64	36.61	81.30	96.26	-917.99	2,902.87	985.84	868.97	116.87	8.435	
11,900.00	8,933.23	12,073.16	9,041.02	37.49	83.85	96.25	-917.99	3,002.86	985.83	865.53	120.29	8.195	
11,937.88	8,933.80	12,111.04	9,041.55	37.82	84.82	96.25	-917.99	3,040.74	985.82	864.23	121.59	8.107	
11,938.61	8,933.81	12,111.77	9,041.56	37.83	84.83	96.25	-917.99	3,041.47	985.82	864.20	121.62	8.106	
12,000.00	8,934.73	12,173.15	9,042.41	38.38	86.40	96.25	-917.99	3,102.85	986.15	862.42	123.73	7.970	
12,100.00	8,936.24	12,273.13	9,043.79	39.28	88.96	96.25	-917.99	3,202.82	988.08	860.89	127.19	7.769	
12,200.00	8,937.74	12,373.06	9,045.18	40.19	91.52	96.24	-917.99	3,302.74	991.75	861.09	130.66	7.590	
12,300.00	8,939.24	12,472.91	9,046.56	41.11	94.09	96.22	-917.99	3,402.58	997.15	863.01	134.14	7.433	
12,400.00	8,940.74	12,572.65	9,047.94	42.03	96.65	96.19	-917.99	3,502.31	1,004.28	866.64	137.64	7.297	
12,491.82	8,942.12	12,664.11	9,049.21	42.89	99.00	96.16	-917.99	3,593.76	1,012.35	871.50	140.85	7.187	
12,500.00	8,942.24	12,672.26	9,049.32	42.96	99.21	96.15	-917.99	3,601.90	1,013.14	872.00	141.14	7.178	
12,600.00	8,943.75	12,771.79	9,050.70	43.90	101.78	96.09	-917.99	3,701.43	1,022.73	878.08	144.65	7.071	
12,700.00	8,945.25	12,871.32	9,052.08	44.84	104.35	96.02	-917.99	3,800.95	1,032.31	884.15	148.17	6.967	
12,800.00	8,946.75	12,970.85	9,053.45	45.80	106.92	95.96	-917.99	3,900.47	1,041.90	890.21	151.70	6.868	
12,900.00	8,948.25	13,070.39	9,054.83	46.76	109.49	95.90	-917.99	4,000.00	1,051.49	896.26	155.23	6.774	
13,000.00	8,949.75	13,169.92	9,056.21	47.72	112.07	95.84	-917.99	4,099.52	1,061.09	902.30	158.78	6.683	
13,100.00	8,951.25	13,269.45	9,057.59	48.70	114.65	95.78	-917.99	4,199.04	1,070.68	908.34	162.34	6.595	
13,200.00	8,952.75	13,368.99	9,058.97	49.67	117.23	95.73	-917.99	4,298.57	1,080.27	914.37	165.90	6.512	
13,300.00	8,954.25	13,468.52	9,060.35	50.66	119.81	95.67	-917.99	4,398.09	1,089.87	920.40	169.47	6.431	
13,400.00	8,955.75	13,568.05	9,061.72	51.65	122.39	95.61	-917.99	4,497.61	1,099.46	926.42	173.05	6.354	
13,500.00	8,957.25	13,667.58	9,063.10	52.64	124.98	95.56	-917.99	4,597.14	1,109.06	932.43	176.63	6.279	
13,600.00	8,958.75	13,767.12	9,064.48	53.64	127.57	95.51	-917.99	4,696.66	1,118.66	938.44	180.22	6.207	
13,700.00	8,960.26	13,866.65	9,065.86	54.64	130.16	95.45	-917.99	4,796.18	1,128.26	944.44	183.82	6.138	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWJ 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Onyx PWJ 29-28 - 12H - OH - Plan #2														Offset Site Error: 0.00 usft
Survey Program: 0-LEAM MWD+HDGM														Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		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		
13,800.00	8,961.76	13,966.18	9,067.24	55.64	132.75	95.40	-917.99	4,895.71	1,137.86	950.44	187.42	6.071		
13,900.00	8,963.26	14,065.72	9,068.62	56.65	135.34	95.35	-917.99	4,995.23	1,147.46	956.44	191.02	6.007		
14,000.00	8,964.76	14,165.25	9,069.99	57.67	137.93	95.30	-917.99	5,094.75	1,157.06	962.43	194.63	5.945		
14,100.00	8,966.26	14,264.78	9,071.37	58.69	140.53	95.25	-917.99	5,194.28	1,166.66	968.42	198.25	5.885		
14,200.00	8,967.76	14,364.31	9,072.75	59.71	143.12	95.20	-917.99	5,293.80	1,176.27	974.40	201.86	5.827		
14,211.82	8,967.94	14,376.08	9,072.91	59.83	143.43	95.20	-917.99	5,305.57	1,177.40	975.11	202.29	5.820		
14,300.00	8,969.26	14,463.91	9,074.13	60.73	145.72	95.14	-917.99	5,393.39	1,185.20	979.71	205.49	5.768		
14,400.00	8,970.77	14,563.65	9,075.51	61.76	148.32	95.08	-917.99	5,493.11	1,192.41	983.29	209.12	5.702		
14,500.00	8,972.28	14,663.49	9,076.89	62.80	150.93	95.03	-917.99	5,592.95	1,197.89	985.12	212.76	5.630		
14,600.00	8,973.79	14,763.42	9,078.28	63.84	153.54	94.99	-917.99	5,692.87	1,201.63	985.21	216.41	5.553		
14,700.00	8,975.30	14,863.40	9,079.66	64.88	156.15	94.96	-917.99	5,792.84	1,203.63	983.56	220.06	5.469		
14,765.09	8,976.29	14,928.49	9,080.56	65.56	157.85	94.95	-917.99	5,857.92	1,204.00	981.55	222.44	5.413		
14,800.00	8,976.82	14,963.40	9,081.05	65.92	158.76	94.94	-917.99	5,892.82	1,204.00	980.28	223.72	5.382		
14,900.00	8,978.33	15,063.40	9,082.43	66.97	161.38	94.94	-917.99	5,992.81	1,204.00	976.62	227.38	5.295		
15,000.00	8,979.85	15,163.40	9,083.82	68.02	163.99	94.93	-917.99	6,092.81	1,204.00	972.96	231.04	5.211		
15,100.00	8,981.36	15,263.40	9,085.20	69.08	166.60	94.92	-917.99	6,192.80	1,204.00	969.30	234.70	5.130		
15,200.00	8,982.88	15,363.40	9,086.59	70.13	169.22	94.92	-917.99	6,292.79	1,204.00	965.63	238.37	5.051		
15,300.00	8,984.39	15,463.40	9,087.97	71.19	171.84	94.91	-917.99	6,392.78	1,204.00	961.96	242.04	4.974		
15,400.00	8,985.91	15,563.40	9,089.36	72.25	174.45	94.91	-917.99	6,492.77	1,204.00	958.29	245.71	4.900		
15,500.00	8,987.42	15,663.40	9,090.74	73.31	177.07	94.90	-917.99	6,592.76	1,204.00	954.62	249.38	4.828		
15,600.00	8,988.94	15,763.40	9,092.13	74.37	179.69	94.89	-917.99	6,692.75	1,204.00	950.94	253.06	4.758		
15,700.00	8,990.45	15,863.40	9,093.51	75.44	182.31	94.89	-917.99	6,792.74	1,204.00	947.26	256.74	4.690		
15,800.00	8,991.97	15,963.40	9,094.90	76.50	184.93	94.88	-917.99	6,892.73	1,204.00	943.58	260.42	4.623		
15,900.00	8,993.48	16,063.40	9,096.28	77.57	187.55	94.87	-917.99	6,992.72	1,204.00	939.90	264.10	4.559		
16,000.00	8,995.00	16,163.40	9,097.67	78.64	190.17	94.87	-917.99	7,092.71	1,204.00	936.22	267.78	4.496		
16,100.00	8,996.51	16,263.40	9,099.05	79.71	192.79	94.86	-917.99	7,192.70	1,204.00	932.53	271.47	4.435		
16,200.00	8,998.03	16,363.40	9,100.44	80.78	195.41	94.86	-917.99	7,292.69	1,204.00	928.84	275.16	4.376		
16,300.00	8,999.54	16,463.40	9,101.82	81.85	198.03	94.85	-917.99	7,392.68	1,204.00	925.16	278.85	4.318		
16,400.00	9,001.06	16,563.40	9,103.21	82.93	200.65	94.84	-917.99	7,492.67	1,204.00	921.47	282.54	4.261		
16,500.00	9,002.57	16,663.40	9,104.59	84.00	203.28	94.84	-917.99	7,592.66	1,204.00	917.77	286.23	4.206		
16,528.18	9,003.00	16,691.57	9,104.98	84.30	204.02	94.84	-917.99	7,620.83	1,204.01	916.73	287.27	4.191		

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - Mirage 30 PM State Com 1H (Offset) - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 200-NS-GYRO-MS, 7269-MWD-ISCWSA, 12150-Project												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		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	4.90	4.90	0.00	0.01	-154.14	-942.39	-456.77	1,047.26				
100.00	100.00	100.92	100.92	0.09	0.12	-154.14	-942.55	-456.91	1,047.47	1,047.26	0.20	5,111.969	
200.00	200.00	200.00	200.00	0.31	0.23	-154.13	-943.01	-457.31	1,048.06	1,047.51	0.54	1,927.531	
300.00	300.00	297.60	297.60	0.54	0.49	-154.12	-943.56	-457.85	1,048.81	1,047.78	1.03	1,021.506	
400.00	400.00	398.42	398.41	0.76	0.76	-154.10	-944.05	-458.42	1,049.48	1,047.97	1.52	691.510	
500.00	500.00	498.14	498.13	0.99	1.02	-154.08	-944.46	-459.05	1,050.13	1,048.13	2.00	524.049	
600.00	600.00	597.85	597.84	1.21	1.28	-154.05	-944.85	-459.79	1,050.81	1,048.32	2.49	422.009	
700.00	700.00	689.75	689.72	1.43	1.52	-154.00	-945.34	-461.03	1,051.88	1,048.92	2.95	355.996	
800.00	800.00	781.43	781.37	1.66	1.76	-153.91	-946.11	-463.33	1,053.74	1,050.32	3.42	308.207	
900.00	900.00	880.38	880.27	1.88	2.02	-153.77	-947.14	-466.56	1,056.11	1,052.21	3.90	270.695	
1,000.00	1,000.00	981.20	981.03	2.11	2.28	-153.64	-948.12	-469.84	1,058.42	1,054.03	4.39	241.158	
1,100.00	1,100.00	1,089.58	1,089.36	2.33	2.56	-153.51	-948.90	-472.99	1,060.37	1,055.48	4.89	216.958	
1,200.00	1,200.00	1,199.75	1,199.50	2.56	2.83	-153.40	-949.04	-475.19	1,061.37	1,055.98	5.39	196.957	
1,300.00	1,300.00	1,299.99	1,299.73	2.78	3.08	-153.33	-948.90	-476.63	1,061.89	1,056.02	5.86	181.115	
1,400.00	1,400.00	1,400.22	1,399.95	3.01	3.33	-153.27	-948.82	-477.89	1,062.38	1,056.05	6.34	167.643	
1,500.00	1,500.00	1,504.29	1,504.02	3.23	3.56	-153.21	-948.63	-478.94	1,062.68	1,055.89	6.79	156.476	
1,600.00	1,600.00	1,608.09	1,607.82	3.46	3.79	-153.17	-948.17	-479.65	1,062.59	1,055.35	7.24	146.739	
1,700.00	1,700.00	1,708.80	1,708.52	3.68	3.96	-153.13	-947.61	-480.12	1,062.30	1,054.65	7.64	138.963	
1,800.00	1,800.00	1,809.33	1,809.05	3.91	4.14	-153.10	-947.05	-480.43	1,061.94	1,053.90	8.05	131.963	
1,900.00	1,900.00	1,908.19	1,907.91	4.13	4.32	-153.08	-946.59	-480.64	1,061.63	1,053.18	8.45	125.681	
2,000.00	2,000.00	2,007.43	2,007.15	4.36	4.49	-153.07	-946.27	-480.79	1,061.41	1,052.57	8.85	119.975	
2,100.00	2,100.00	2,111.67	2,111.39	4.58	4.67	-153.05	-945.75	-480.92	1,061.02	1,051.77	9.25	114.688	
2,200.00	2,200.00	2,214.19	2,213.91	4.81	4.84	-153.02	-944.80	-481.02	1,060.24	1,050.60	9.84	109.948	
2,300.00	2,300.00	2,307.25	2,306.96	5.03	4.94	-153.01	-944.34	-480.89	1,059.74	1,049.77	9.97	106.344	
2,326.79	2,326.79	2,332.17	2,331.89	5.09	4.96	-153.02	-944.36	-480.80	1,059.71	1,049.66	10.05	105.430	
2,400.00	2,400.00	2,400.00	2,399.71	5.26	5.03	-153.05	-944.74	-480.43	1,059.89	1,049.60	10.29	103.037	
2,500.00	2,500.00	2,497.62	2,497.32	5.48	5.12	-153.10	-945.69	-479.85	1,060.50	1,049.90	10.60	100.089	
2,600.00	2,600.00	2,594.91	2,594.61	5.71	5.20	-153.14	-946.83	-479.46	1,061.36	1,050.45	10.90	97.336	
2,700.00	2,700.00	2,693.74	2,693.43	5.93	5.32	-153.19	-948.17	-479.11	1,062.40	1,051.15	11.25	94.433	
2,800.00	2,800.00	2,792.64	2,792.31	6.15	5.45	-153.25	-949.67	-478.65	1,063.56	1,051.96	11.60	91.697	
2,900.00	2,900.00	2,894.02	2,893.68	6.38	5.59	-153.31	-951.22	-478.15	1,064.70	1,052.73	11.97	88.976	
3,000.00	3,000.00	2,995.61	2,995.26	6.60	5.73	-153.36	-952.56	-477.76	1,065.70	1,053.36	12.34	86.393	
3,100.00	3,100.00	3,096.55	3,096.19	6.83	5.88	-153.42	-953.82	-477.22	1,066.58	1,053.87	12.70	83.958	
3,200.00	3,200.00	3,197.45	3,197.08	7.05	6.02	-153.50	-955.19	-476.26	1,067.37	1,054.30	13.07	81.655	
3,300.00	3,300.00	3,297.57	3,297.19	7.28	6.17	-153.58	-956.54	-475.22	1,068.11	1,054.67	13.45	79.443	
3,400.00	3,400.00	3,397.68	3,397.28	7.50	6.32	-153.65	-957.74	-474.47	1,068.85	1,055.03	13.82	77.350	
3,500.00	3,500.00	3,501.48	3,501.08	7.73	6.47	-153.72	-958.87	-473.49	1,069.41	1,055.21	14.20	75.331	
3,600.00	3,600.00	3,605.18	3,604.75	7.95	6.62	-153.83	-959.96	-471.74	1,069.60	1,055.03	14.57	73.397	
3,700.00	3,700.00	3,705.58	3,705.11	8.18	6.76	-153.97	-961.13	-469.37	1,069.62	1,054.68	14.94	71.616	
3,800.00	3,800.00	3,806.26	3,805.74	8.40	6.90	-154.15	-962.57	-466.37	1,069.60	1,054.30	15.30	69.914	
3,900.00	3,900.00	3,912.01	3,911.42	8.63	7.05	-154.36	-963.94	-462.74	1,069.28	1,053.60	15.67	68.220	
4,000.00	4,000.00	4,017.16	4,016.49	8.85	7.20	-154.57	-964.85	-458.76	1,068.43	1,052.38	16.05	66.576	
4,100.00	4,100.00	4,119.34	4,118.59	9.07	7.35	-79.33	-965.51	-454.59	1,067.10	1,050.69	16.41	65.022	
4,200.00	4,199.96	4,221.19	4,220.33	9.27	7.50	-79.71	-966.05	-450.17	1,065.26	1,048.50	16.77	63.537	
4,300.00	4,299.86	4,322.20	4,321.26	9.48	7.65	-80.18	-966.29	-446.05	1,063.02	1,045.89	17.13	62.068	
4,393.15	4,392.85	4,416.16	4,415.16	9.67	7.80	-80.67	-966.18	-442.66	1,060.60	1,043.14	17.47	60.727	
4,400.00	4,399.68	4,423.03	4,422.03	9.69	7.81	-80.70	-966.16	-442.42	1,060.42	1,042.93	17.49	60.629	
4,500.00	4,499.44	4,523.46	4,522.40	9.90	7.97	-81.23	-965.82	-439.04	1,057.68	1,039.82	17.86	59.222	
4,600.00	4,599.20	4,623.44	4,622.32	10.11	8.12	-81.75	-965.35	-435.78	1,054.94	1,036.71	18.23	57.864	
4,700.00	4,698.97	4,721.91	4,720.76	10.33	8.28	-82.25	-964.79	-432.91	1,052.33	1,033.73	18.61	56.554	
4,800.00	4,798.73	4,821.84	4,820.65	10.55	8.45	-82.73	-964.13	-430.43	1,049.89	1,030.91	18.99	55.299	
4,900.00	4,898.50	4,927.06	4,925.83	10.76	8.61	-83.20	-962.88	-428.28	1,047.18	1,027.82	19.37	54.071	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - Mirage 30 PM State Com 1H (Offset) - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 200-NS-GYRO-MS, 7269-MWD-ISCWSA, 12150-Project													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	
5,000.00	4,998.26	5,029.46	5,028.20	10.98	8.77	-83.63	-960.95	-426.60	1,044.05	1,024.30	19.75	52.873	
5,100.00	5,098.03	5,125.35	5,124.07	11.20	8.93	-84.04	-959.28	-425.07	1,041.11	1,020.99	20.12	51.741	
5,200.00	5,197.79	5,222.46	5,221.16	11.43	9.08	-84.46	-957.98	-423.45	1,038.58	1,018.07	20.50	50.654	
5,300.00	5,297.56	5,323.80	5,322.47	11.65	9.26	-84.93	-956.74	-421.38	1,036.10	1,015.19	20.91	49.559	
5,400.00	5,397.32	5,422.24	5,420.87	11.87	9.44	-85.41	-955.58	-418.91	1,033.57	1,012.25	21.31	48.498	
5,500.00	5,497.09	5,512.06	5,510.65	12.10	9.62	-85.88	-955.20	-416.41	1,031.74	1,010.02	21.72	47.506	
5,600.00	5,596.85	5,600.00	5,598.55	12.33	9.80	-86.36	-955.74	-413.80	1,030.94	1,008.82	22.12	46.606	
5,677.06	5,673.73	5,676.36	5,674.87	12.50	9.96	-86.79	-956.74	-411.36	1,030.82	1,008.36	22.46	45.897 CC	
5,700.00	5,696.62	5,698.51	5,697.00	12.55	10.01	-86.92	-957.08	-410.60	1,030.83	1,008.27	22.56	45.694	
5,800.00	5,796.38	5,794.97	5,793.38	12.78	10.22	-87.50	-958.79	-407.12	1,031.12	1,008.12	22.99	44.842 ES	
5,900.00	5,896.15	5,894.60	5,892.91	13.01	10.44	-88.12	-960.78	-403.25	1,031.66	1,008.22	23.44	44.007	
6,000.00	5,995.91	5,994.37	5,992.59	13.24	10.66	-88.74	-962.77	-399.25	1,032.29	1,008.39	23.89	43.205	
6,100.00	6,095.67	6,092.71	6,090.84	13.47	10.88	-89.34	-964.69	-395.56	1,033.06	1,008.72	24.34	42.437	
6,200.00	6,195.44	6,191.12	6,189.19	13.70	11.10	-89.90	-966.52	-392.62	1,034.05	1,009.25	24.80	41.703	
6,300.00	6,295.20	6,289.86	6,287.89	13.93	11.32	-90.42	-968.26	-390.36	1,035.22	1,009.97	25.25	40.998	
6,400.00	6,394.97	6,388.74	6,386.74	14.17	11.54	-90.90	-969.94	-388.67	1,036.55	1,010.84	25.71	40.323	
6,500.00	6,494.73	6,486.02	6,484.00	14.40	11.75	-91.35	-971.58	-387.64	1,038.08	1,011.94	26.15	39.702	
6,600.00	6,594.50	6,583.18	6,581.14	14.63	11.96	-91.75	-973.30	-387.32	1,039.92	1,013.34	26.59	39.115	
6,700.00	6,694.26	6,684.36	6,682.31	14.87	12.14	-92.13	-975.00	-387.78	1,041.90	1,014.90	27.00	38.586	
6,800.00	6,794.03	6,786.49	6,784.42	15.10	12.32	-92.46	-976.31	-389.09	1,043.70	1,016.29	27.41	38.074	
6,900.00	6,893.79	6,890.55	6,888.46	15.34	12.46	-92.75	-977.18	-391.13	1,045.24	1,017.44	27.79	37.606	
7,000.00	6,993.56	6,994.94	6,992.82	15.57	12.60	-93.02	-977.52	-393.53	1,046.36	1,018.19	28.17	37.143	
7,100.00	7,093.32	7,119.71	7,117.49	15.81	12.75	-93.23	-975.89	-397.89	1,046.15	1,017.60	28.55	36.641	
7,143.76	7,136.98	7,148.41	7,146.16	15.91	12.77	-93.27	-975.30	-399.19	1,045.83	1,017.16	28.68	36.470	
7,200.00	7,193.09	7,185.12	7,182.83	16.04	12.79	-93.32	-975.18	-400.80	1,046.36	1,017.53	28.83	36.295	
7,300.00	7,292.85	7,269.00	7,266.60	16.28	12.84	-93.47	-977.57	-404.31	1,050.15	1,021.00	29.15	36.031	
7,400.00	7,392.62	7,311.34	7,308.67	16.52	12.84	-93.44	-979.96	-408.21	1,056.95	1,027.44	29.51	35.814 SF	
7,500.00	7,492.38	7,388.38	7,383.51	16.76	12.86	-92.84	-983.97	-425.58	1,066.96	1,037.19	29.77	35.842	
7,600.00	7,592.15	7,450.53	7,440.91	16.99	12.88	-91.84	-986.26	-449.19	1,079.58	1,049.57	30.01	35.977	
7,615.05	7,607.16	7,460.00	7,449.39	17.03	12.89	-91.65	-986.67	-453.38	1,081.85	1,051.81	30.04	36.013	
7,700.00	7,691.95	7,579.59	7,549.54	17.21	13.07	-88.77	-986.69	-518.21	1,095.01	1,064.85	30.17	36.299	
7,800.00	7,791.85	7,721.66	7,647.30	17.40	13.65	-83.79	-965.85	-618.39	1,105.83	1,075.10	30.73	35.988	
7,900.00	7,891.81	7,755.60	7,666.10	17.58	13.88	-82.53	-958.65	-645.70	1,122.42	1,091.63	30.79	36.449	
8,008.20	8,000.00	7,777.00	7,677.11	17.78	14.04	-157.38	-954.38	-663.55	1,148.90	1,118.13	30.77	37.338	
8,100.00	8,091.80	7,790.39	7,683.64	17.96	14.15	-156.78	-951.94	-674.97	1,178.14	1,147.43	30.71	38.367	
8,200.00	8,191.80	7,809.00	7,692.20	18.17	14.31	-155.95	-948.87	-691.21	1,216.60	1,186.04	30.57	39.803	
8,300.00	8,291.80	7,809.00	7,692.20	18.39	14.31	-155.95	-948.87	-691.21	1,261.37	1,231.15	30.22	41.737	
8,328.31	8,320.11	7,809.00	7,692.20	18.45	14.31	-155.95	-948.87	-691.21	1,275.19	1,245.08	30.11	42.351	
8,350.00	8,341.80	7,821.52	7,697.60	18.49	14.44	113.46	-947.02	-702.35	1,286.01	1,255.90	30.11	42.715	
8,400.00	8,391.61	7,825.99	7,699.46	18.58	14.48	110.66	-946.40	-706.37	1,313.27	1,283.36	29.91	43.902	
8,450.00	8,440.89	7,841.00	7,705.42	18.65	14.63	107.93	-944.47	-720.01	1,343.25	1,313.46	29.79	45.089	
8,500.00	8,489.24	7,841.00	7,705.42	18.72	14.63	103.96	-944.47	-720.01	1,375.10	1,345.54	29.56	46.517	
8,550.00	8,536.31	7,841.00	7,705.42	18.78	14.63	99.49	-944.47	-720.01	1,408.79	1,379.45	29.34	48.015	
8,600.00	8,581.73	7,841.00	7,705.42	18.84	14.63	94.59	-944.47	-720.01	1,443.93	1,414.79	29.14	49.558	
8,650.00	8,625.16	7,841.00	7,705.42	18.91	14.63	89.34	-944.47	-720.01	1,480.16	1,451.20	28.96	51.117	
8,700.00	8,666.27	7,841.00	7,705.42	18.98	14.63	83.86	-944.47	-720.01	1,517.14	1,488.33	28.81	52.665	
8,750.00	8,704.75	7,825.81	7,699.39	19.07	14.48	77.54	-946.42	-706.21	1,554.20	1,525.62	28.58	54.376	
8,800.00	8,740.30	7,822.19	7,697.89	19.20	14.44	71.95	-946.93	-702.95	1,591.54	1,563.05	28.49	55.869	
8,850.00	8,772.65	7,809.00	7,692.20	19.36	14.31	66.25	-948.87	-691.21	1,628.75	1,600.38	28.37	57.416	
8,900.00	8,801.55	7,809.00	7,692.20	19.57	14.31	61.47	-948.87	-691.21	1,665.21	1,636.82	28.40	58.638	
8,950.00	8,826.79	7,809.00	7,692.20	19.85	14.31	57.07	-948.87	-691.21	1,700.96	1,672.48	28.48	59.722	
9,000.00	8,848.18	7,809.00	7,692.20	20.18	14.31	53.10	-948.87	-691.21	1,735.76	1,707.15	28.62	60.654	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - Mirage 30 PM State Com 1H (Offset) - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 200-NB-GYRO-MS, 7269-MWD-ISCWSA, 12150-Project													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance		Minimum		Separation		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		
9,050.00	8,865.55	7,795.38	7,686.00	20.59	14.20	49.30	-951.07	-679.29	1,769.15	1,740.44	28.72	61.609		
9,100.00	8,878.76	7,777.00	7,677.11	21.06	14.04	45.94	-954.38	-663.55	1,801.35	1,772.51	28.84	62.462		
9,150.00	8,887.72	7,777.00	7,677.11	21.60	14.04	43.28	-954.38	-663.55	1,831.53	1,802.40	29.13	62.877		
9,200.00	8,892.37	7,777.00	7,677.11	22.20	14.04	40.95	-954.38	-663.55	1,860.03	1,830.57	29.46	63.138		
9,219.71	8,893.00	7,777.00	7,677.11	22.45	14.04	40.12	-954.38	-663.55	1,870.77	1,841.17	29.60	63.207		
9,300.00	8,894.21	7,746.00	7,660.96	23.72	13.81	39.91	-960.69	-637.85	1,914.72	1,885.24	29.49	64.938		
9,400.00	8,895.71	7,746.00	7,660.96	23.80	13.81	39.91	-960.69	-637.85	1,971.89	1,942.01	29.88	65.986		
9,500.00	8,897.21	7,714.00	7,642.81	23.88	13.60	39.67	-967.44	-612.38	2,031.54	2,001.44	30.10	67.495		
9,600.00	8,898.71	7,698.54	7,633.45	23.96	13.52	39.54	-970.58	-600.48	2,093.62	2,063.16	30.46	68.728		
9,700.00	8,900.21	7,682.00	7,623.00	24.04	13.43	39.39	-973.84	-588.09	2,157.96	2,127.13	30.83	69.994		
9,800.00	8,901.71	7,650.00	7,601.53	24.14	13.29	39.06	-979.33	-565.01	2,224.37	2,193.24	31.12	71.467		
9,900.00	8,903.21	7,636.44	7,591.98	24.26	13.24	38.90	-981.24	-555.58	2,292.40	2,260.86	31.54	72.685		
10,000.00	8,904.72	7,619.00	7,579.38	24.50	13.18	38.68	-983.35	-543.71	2,362.11	2,330.18	31.93	73.970		
10,100.00	8,906.22	7,587.00	7,555.29	24.88	13.09	38.24	-986.21	-522.85	2,433.40	2,401.15	32.25	75.453		
10,200.00	8,907.72	7,576.09	7,546.80	25.32	13.06	38.08	-986.90	-516.03	2,506.11	2,473.43	32.68	76.689		
10,300.00	8,909.22	7,555.00	7,530.11	25.80	13.01	37.76	-987.86	-503.18	2,580.23	2,547.18	33.05	78.071		
10,400.00	8,910.72	7,542.14	7,519.71	26.33	12.99	37.55	-988.21	-495.61	2,655.66	2,622.20	33.45	79.383		
10,500.00	8,912.22	7,523.00	7,503.93	26.89	12.96	37.24	-988.38	-484.80	2,732.42	2,698.60	33.82	80.794		
10,600.00	8,913.72	7,523.00	7,503.93	27.49	12.96	37.24	-988.38	-484.80	2,810.37	2,776.11	34.26	82.036		
10,700.00	8,915.22	7,508.21	7,491.47	28.12	12.94	36.99	-988.25	-476.84	2,889.48	2,854.86	34.62	83.461		
10,800.00	8,916.72	7,491.00	7,476.67	28.77	12.91	36.68	-987.85	-468.05	2,969.76	2,934.79	34.96	84.937		
10,900.00	8,918.22	7,491.00	7,476.67	29.46	12.91	36.68	-987.85	-468.05	3,050.94	3,015.58	35.36	86.285		
11,000.00	8,919.72	7,491.00	7,476.67	30.17	12.91	36.68	-987.85	-468.05	3,133.22	3,097.48	35.74	87.673		
11,100.00	8,921.23	7,473.10	7,461.01	30.91	12.90	36.36	-987.22	-459.41	3,216.21	3,180.17	36.05	89.224		
11,200.00	8,922.73	7,460.00	7,449.39	31.67	12.89	36.12	-986.67	-453.38	3,300.14	3,263.78	36.36	90.760		
11,300.00	8,924.23	7,460.00	7,449.39	32.45	12.89	36.12	-986.67	-453.38	3,384.80	3,348.10	36.70	92.225		
11,400.00	8,925.73	7,460.00	7,449.39	33.25	12.89	36.12	-986.67	-453.38	3,470.27	3,433.25	37.03	93.719		
11,500.00	8,927.23	7,460.00	7,449.39	34.06	12.89	36.12	-986.67	-453.38	3,556.51	3,519.16	37.34	95.239		
11,600.00	8,928.73	7,428.00	7,420.44	34.90	12.87	35.54	-985.41	-439.82	3,643.26	3,605.68	37.58	96.947		
11,700.00	8,930.23	7,428.00	7,420.44	35.75	12.87	35.54	-985.41	-439.82	3,730.50	3,692.63	37.88	98.490		
11,800.00	8,931.73	7,428.00	7,420.44	36.61	12.87	35.54	-985.41	-439.82	3,818.37	3,780.21	38.16	100.053		
11,900.00	8,933.23	7,428.00	7,420.44	37.49	12.87	35.54	-985.41	-439.82	3,906.82	3,868.38	38.44	101.635		
11,937.88	8,933.80	7,428.00	7,420.44	37.82	12.87	35.54	-985.41	-439.82	3,940.48	3,901.94	38.54	102.239		
12,000.00	8,934.73	7,428.00	7,420.44	38.38	12.87	34.55	-985.41	-439.82	3,995.91	3,957.20	38.71	103.236		
12,100.00	8,936.24	7,428.00	7,420.44	39.28	12.87	32.85	-985.41	-439.82	4,085.90	4,046.93	38.96	104.864		
12,200.00	8,937.74	7,428.00	7,420.44	40.19	12.87	31.02	-985.41	-439.82	4,176.74	4,137.53	39.21	106.519		
12,300.00	8,939.24	7,396.00	7,390.71	41.11	12.86	28.55	-984.27	-428.07	4,268.22	4,228.80	39.42	108.281		
12,400.00	8,940.74	7,396.00	7,390.71	42.03	12.86	26.48	-984.27	-428.07	4,360.27	4,320.61	39.65	109.964		
12,491.82	8,942.12	7,396.00	7,390.71	42.89	12.86	24.45	-984.27	-428.07	4,445.34	4,405.49	39.86	111.526		
12,500.00	8,942.24	7,396.00	7,390.71	42.96	12.86	24.45	-984.27	-428.07	4,452.95	4,413.07	39.88	111.666		
12,600.00	8,943.75	7,396.00	7,390.71	43.90	12.86	24.45	-984.27	-428.07	4,546.05	4,505.95	40.10	113.381		
12,700.00	8,945.25	7,396.00	7,390.71	44.84	12.86	24.45	-984.27	-428.07	4,639.44	4,599.13	40.31	115.100		
12,800.00	8,946.75	7,396.00	7,390.71	45.80	12.86	24.45	-984.27	-428.07	4,733.10	4,692.59	40.52	116.823		
12,900.00	8,948.25	7,396.00	7,390.71	46.76	12.86	24.45	-984.27	-428.07	4,827.01	4,786.30	40.72	118.549		
13,000.00	8,949.75	7,396.00	7,390.71	47.72	12.86	24.45	-984.27	-428.07	4,921.17	4,880.25	40.92	120.277		
13,100.00	8,951.25	7,396.00	7,390.71	48.70	12.86	24.45	-984.27	-428.07	5,015.55	4,974.44	41.11	122.006		
13,200.00	8,952.75	7,396.00	7,390.71	49.67	12.86	24.45	-984.27	-428.07	5,110.15	5,068.85	41.30	123.736		
13,300.00	8,954.25	7,396.00	7,390.71	50.66	12.86	24.45	-984.27	-428.07	5,204.94	5,163.46	41.49	125.466		
13,400.00	8,955.75	7,379.99	7,375.54	51.65	12.86	24.23	-983.61	-423.00	5,299.59	5,257.92	41.67	127.184		
13,500.00	8,957.25	7,365.00	7,361.16	52.64	12.85	24.01	-982.89	-418.84	5,394.89	5,353.04	41.85	128.907		
13,600.00	8,958.75	7,365.00	7,361.16	53.64	12.85	24.01	-982.89	-418.84	5,490.08	5,448.05	42.03	130.622		
13,700.00	8,960.26	7,365.00	7,361.16	54.64	12.85	24.01	-982.89	-418.84	5,585.43	5,543.22	42.21	132.335		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design Onyx PWU 29-28 - Mirage 30 PM State Com 1H (Offset) - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 200-NS-GYRO-MS, 7269-MWD-ISCWSA, 12150-Project													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				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)	Minimum Separation (usft)	Separation Factor	
13,800.00	8,961.76	7,365.00	7,361.16	55.64	12.85	24.01	-982.89	-418.84	5,680.94	5,638.56	42.38	134.046	
13,900.00	8,963.26	7,365.00	7,361.16	56.65	12.85	24.01	-982.89	-418.84	5,776.60	5,734.05	42.55	135.753	
14,000.00	8,964.76	7,365.00	7,361.16	57.67	12.85	24.01	-982.89	-418.84	5,872.41	5,829.69	42.72	137.458	
14,100.00	8,966.26	7,365.00	7,361.16	58.69	12.85	24.01	-982.89	-418.84	5,968.35	5,925.46	42.89	139.159	
14,200.00	8,967.76	7,365.00	7,361.16	59.71	12.85	24.01	-982.89	-418.84	6,064.43	6,021.37	43.05	140.856	
14,211.82	8,967.94	7,365.00	7,361.16	59.83	12.85	24.01	-982.89	-418.84	6,075.79	6,032.72	43.07	141.056	
14,300.00	8,969.26	7,365.00	7,361.16	60.73	12.85	26.78	-982.89	-418.84	6,160.55	6,117.33	43.22	142.546	
14,400.00	8,970.77	7,365.00	7,361.16	61.76	12.85	29.80	-982.89	-418.84	6,256.58	6,213.20	43.38	144.223	
14,500.00	8,972.28	7,365.00	7,361.16	62.80	12.85	32.68	-982.89	-418.84	6,352.50	6,308.96	43.54	145.886	
14,600.00	8,973.79	7,365.00	7,361.16	63.84	12.85	35.43	-982.89	-418.84	6,448.27	6,404.57	43.71	147.535	
14,700.00	8,975.30	7,365.00	7,361.16	64.88	12.85	38.03	-982.89	-418.84	6,543.89	6,500.02	43.87	149.169	
14,765.09	8,976.29	7,365.00	7,361.16	65.56	12.85	39.65	-982.89	-418.84	6,606.03	6,562.05	43.97	150.224	
14,800.00	8,976.82	7,365.00	7,361.16	65.92	12.85	39.65	-982.89	-418.84	6,639.34	6,595.31	44.03	150.788	
14,900.00	8,978.33	7,365.00	7,361.16	66.97	12.85	39.65	-982.89	-418.84	6,734.85	6,690.66	44.19	152.399	
15,000.00	8,979.85	7,365.00	7,361.16	68.02	12.85	39.65	-982.89	-418.84	6,830.49	6,786.14	44.35	154.005	
15,100.00	8,981.36	7,365.00	7,361.16	69.08	12.85	39.65	-982.89	-418.84	6,926.26	6,881.75	44.51	155.607	
15,200.00	8,982.88	7,365.00	7,361.16	70.13	12.85	39.65	-982.89	-418.84	7,022.14	6,977.47	44.67	157.203	
15,300.00	8,984.39	7,365.00	7,361.16	71.19	12.85	39.65	-982.89	-418.84	7,118.14	7,073.31	44.83	158.795	
15,400.00	8,985.91	7,349.11	7,345.76	72.25	12.85	39.35	-982.05	-415.01	7,213.93	7,168.94	45.00	160.323	
15,500.00	8,987.42	7,333.00	7,330.01	73.31	12.84	39.04	-981.18	-411.74	7,310.37	7,265.20	45.17	161.853	
15,600.00	8,988.94	7,333.00	7,330.01	74.37	12.84	39.04	-981.18	-411.74	7,406.59	7,361.27	45.32	163.423	
15,700.00	8,990.45	7,333.00	7,330.01	75.44	12.84	39.04	-981.18	-411.74	7,502.91	7,457.44	45.48	164.986	
15,800.00	8,991.97	7,333.00	7,330.01	76.50	12.84	39.04	-981.18	-411.74	7,599.33	7,553.70	45.63	166.544	
15,900.00	8,993.48	7,333.00	7,330.01	77.57	12.84	39.04	-981.18	-411.74	7,695.83	7,650.05	45.78	168.096	
16,000.00	8,995.00	7,333.00	7,330.01	78.64	12.84	39.04	-981.18	-411.74	7,792.43	7,746.49	45.93	169.642	
16,100.00	8,996.51	7,333.00	7,330.01	79.71	12.84	39.04	-981.18	-411.74	7,889.11	7,843.02	46.09	171.181	
16,200.00	8,998.03	7,333.00	7,330.01	80.78	12.84	39.04	-981.18	-411.74	7,985.87	7,939.63	46.24	172.715	
16,300.00	8,999.54	7,333.00	7,330.01	81.85	12.84	39.04	-981.18	-411.74	8,082.71	8,036.32	46.39	174.242	
16,400.00	9,001.06	7,333.00	7,330.01	82.93	12.84	39.04	-981.18	-411.74	8,179.63	8,133.09	46.54	175.763	
16,500.00	9,002.57	7,333.00	7,330.01	84.00	12.84	39.04	-981.18	-411.74	8,276.62	8,229.93	46.69	177.277	
16,528.18	9,003.00	7,333.00	7,330.01	84.30	12.84	39.04	-981.18	-411.74	8,303.96	8,257.23	46.73	177.702	

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 100-MWD-ISCWSA													Offset Well Error:	0.00 usft
Reference														
Offset														
Semi Major Axis														
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)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	46.77	0.00	0.00	91.91	-275.78	8,283.74	8,288.50					
100.00	100.00	222.06	222.04	0.09	0.36	91.91	-275.48	8,281.56	8,287.15	8,286.68	0.46	N/A		
200.00	200.00	300.00	299.98	0.31	0.52	91.91	-275.62	8,280.50	8,285.78	8,284.95	0.83	9,987.852		
300.00	300.00	388.55	388.52	0.54	0.70	91.91	-275.99	8,279.47	8,284.62	8,283.38	1.23	6,715.594		
400.00	400.00	480.10	480.06	0.76	0.89	91.91	-276.38	8,278.44	8,283.51	8,281.86	1.65	5,022.389		
500.00	500.00	551.83	551.79	0.99	1.04	91.91	-276.65	8,277.78	8,282.61	8,280.59	2.02	4,096.159		
600.00	600.00	617.91	617.87	1.21	1.18	91.91	-276.72	8,277.44	8,282.10	8,279.72	2.38	3,475.146		
700.00	700.00	700.00	699.96	1.43	1.35	91.91	-276.64	8,277.42	8,282.04	8,279.26	2.78	2,979.746		
706.86	706.86	700.00	699.96	1.45	1.35	91.91	-276.64	8,277.42	8,282.04	8,279.24	2.79	2,963.311		
800.00	800.00	748.39	748.35	1.66	1.45	91.91	-276.56	8,277.61	8,282.35	8,279.24	3.11	2,664.322		
900.00	900.00	800.00	799.96	1.88	1.56	91.91	-276.51	8,277.97	8,283.11	8,279.67	3.44	2,404.569		
1,000.00	1,000.00	850.37	850.32	2.11	1.67	91.91	-276.51	8,278.62	8,284.47	8,280.69	3.78	2,191.697		
1,100.00	1,100.00	900.00	899.94	2.33	1.78	91.91	-276.55	8,279.69	8,286.56	8,282.44	4.11	2,014.600		
1,200.00	1,200.00	978.28	978.20	2.56	1.95	91.91	-276.63	8,281.71	8,289.11	8,284.60	4.51	1,839.483		
1,300.00	1,300.00	1,072.72	1,072.60	2.78	2.15	91.91	-276.75	8,284.18	8,291.73	8,286.80	4.93	1,681.161		
1,400.00	1,400.00	1,182.70	1,182.54	3.01	2.38	91.92	-277.09	8,287.06	8,294.36	8,288.97	5.39	1,540.022		
1,500.00	1,500.00	1,284.92	1,284.73	3.23	2.59	91.92	-277.50	8,289.61	8,296.87	8,291.05	5.82	1,425.922		
1,600.00	1,600.00	1,400.00	1,399.78	3.46	2.82	91.92	-277.82	8,292.39	8,299.29	8,293.02	6.28	1,322.155		
1,700.00	1,700.00	1,487.82	1,487.58	3.68	3.01	91.92	-278.01	8,294.48	8,301.68	8,295.00	6.68	1,241.857		
1,800.00	1,800.00	1,726.44	1,726.15	3.91	3.50	91.92	-278.38	8,298.48	8,303.42	8,296.02	7.40	1,122.108		
1,900.00	1,900.00	1,905.94	1,905.65	4.13	3.87	91.92	-277.98	8,298.84	8,303.50	8,295.51	7.99	1,038.618		
2,000.00	2,000.00	2,056.84	2,056.55	4.36	4.18	91.92	-277.53	8,298.21	8,303.09	8,294.56	8.54	972.610		
2,100.00	2,100.00	2,265.75	2,265.43	4.58	4.62	91.91	-276.31	8,295.15	8,301.54	8,292.33	9.21	901.777		
2,200.00	2,200.00	2,373.73	2,373.38	4.81	4.85	91.90	-275.73	8,292.83	8,299.37	8,289.72	9.66	859.395		
2,300.00	2,300.00	2,471.56	2,471.20	5.03	5.05	91.90	-275.28	8,290.73	8,297.21	8,287.13	10.09	822.721		
2,400.00	2,400.00	2,565.48	2,565.09	5.26	5.25	91.90	-275.04	8,288.75	8,295.10	8,284.59	10.51	789.599		
2,500.00	2,500.00	2,664.62	2,664.21	5.48	5.45	91.90	-274.81	8,286.72	8,293.04	8,282.11	10.94	758.264		
2,600.00	2,600.00	2,762.33	2,761.90	5.71	5.66	91.90	-274.33	8,284.72	8,290.98	8,279.62	11.37	729.501		
2,700.00	2,700.00	2,905.78	2,905.30	5.93	5.96	91.89	-273.05	8,281.57	8,288.79	8,276.90	11.89	697.085		
2,800.00	2,800.00	3,012.68	3,012.17	6.15	6.18	91.88	-271.83	8,278.82	8,286.17	8,273.83	12.34	671.443		
2,900.00	2,900.00	3,100.00	3,099.45	6.38	6.37	91.87	-270.88	8,276.57	8,283.58	8,270.83	12.75	649.769		
3,000.00	3,000.00	3,190.35	3,189.77	6.60	6.55	91.87	-269.99	8,274.37	8,281.11	8,267.95	13.16	629.193		
3,100.00	3,100.00	3,285.20	3,284.59	6.83	6.75	91.86	-269.18	8,272.18	8,278.77	8,265.19	13.59	609.404		
3,200.00	3,200.00	3,387.59	3,386.95	7.05	6.97	91.86	-268.34	8,269.83	8,276.45	8,262.43	14.02	590.145		
3,300.00	3,300.00	3,498.67	3,498.00	7.28	7.20	91.85	-267.40	8,267.19	8,274.05	8,259.57	14.48	571.325		
3,400.00	3,400.00	3,598.91	3,598.21	7.50	7.42	91.85	-266.60	8,264.73	8,271.57	8,256.65	14.92	554.482		
3,500.00	3,500.00	3,705.72	3,704.98	7.73	7.64	91.84	-265.72	8,262.06	8,269.05	8,253.68	15.37	538.113		
3,600.00	3,600.00	3,810.44	3,809.66	7.95	7.87	91.84	-264.97	8,259.37	8,266.46	8,250.65	15.81	522.767		
3,700.00	3,700.00	3,922.31	3,921.49	8.18	8.10	91.83	-263.79	8,256.40	8,263.77	8,247.49	16.27	507.836		
3,800.00	3,800.00	4,029.47	4,028.59	8.40	8.33	91.82	-262.46	8,253.42	8,260.94	8,244.22	16.72	493.988		
3,900.00	3,900.00	4,130.62	4,129.70	8.63	8.55	91.81	-261.13	8,250.58	8,258.10	8,240.94	17.16	481.207		
4,000.00	4,000.00	4,247.66	4,246.67	8.85	8.80	91.80	-259.59	8,247.19	8,255.17	8,237.53	17.63	468.176		
4,100.00	4,100.00	4,374.57	4,373.51	9.07	9.07	167.32	-258.01	8,243.11	8,252.77	8,234.65	18.11	455.604		
4,200.00	4,199.96	4,504.56	4,503.40	9.27	9.36	167.32	-256.19	8,238.52	8,251.75	8,233.15	18.59	443.856		
4,223.23	4,223.17	4,531.02	4,529.84	9.32	9.41	167.31	-255.82	8,237.53	8,251.70	8,233.01	18.70	441.385		
4,300.00	4,299.86	4,616.37	4,615.12	9.48	9.60	167.31	-254.68	8,234.27	8,252.16	8,233.12	19.03	433.546		
4,393.15	4,392.85	4,710.19	4,708.86	9.67	9.81	167.31	-253.36	8,230.64	8,254.01	8,234.59	19.43	424.914		
4,400.00	4,399.68	4,716.93	4,715.60	9.69	9.82	167.31	-253.25	8,230.38	8,254.20	8,234.75	19.45	424.302		
4,500.00	4,499.44	4,812.16	4,810.74	9.90	10.02	167.31	-251.58	8,226.72	8,257.00	8,237.14	19.86	415.728		
4,600.00	4,599.20	4,900.00	4,898.50	10.11	10.21	167.30	-249.62	8,223.53	8,259.98	8,239.72	20.26	407.780		
4,700.00	4,698.97	4,976.71	4,975.14	10.33	10.38	167.30	-247.64	8,220.91	8,263.16	8,242.53	20.63	400.537		
4,800.00	4,798.73	5,066.88	5,065.22	10.55	10.57	167.29	-245.09	8,217.96	8,266.49	8,245.46	21.03	393.051		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Parkway West (Offsets) - 16 - OH - OH														Offset Site Error: 0.00 usft	
Survey Program: 100-MWD-ISCWSA														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			
4,900.00	4,898.50	5,164.42	5,162.68	10.76	10.78	167.28	-242.22	8,214.85	8,269.91	8,248.46	21.45	385.552			
5,000.00	4,998.26	5,263.66	5,261.82	10.98	11.00	167.27	-239.20	8,211.69	8,273.32	8,251.45	21.87	378.236			
5,100.00	5,098.03	5,365.68	5,363.74	11.20	11.22	167.26	-235.98	8,208.45	8,276.74	8,254.44	22.30	371.077			
5,200.00	5,197.79	5,467.74	5,465.69	11.43	11.45	167.25	-232.57	8,205.17	8,280.12	8,257.38	22.74	364.154			
5,300.00	5,297.56	5,582.64	5,580.45	11.65	11.70	167.23	-228.34	8,201.41	8,283.43	8,260.23	23.20	357.073			
5,400.00	5,397.32	5,714.48	5,712.06	11.87	12.00	167.20	-222.18	8,196.73	8,286.43	8,262.74	23.69	349.722			
5,500.00	5,497.09	5,832.06	5,829.37	12.10	12.27	167.17	-215.66	8,192.24	8,289.13	8,264.97	24.17	343.016			
5,600.00	5,596.85	5,942.49	5,939.54	12.33	12.52	167.14	-209.44	8,187.81	8,291.64	8,267.02	24.62	336.752			
5,700.00	5,696.62	6,039.42	6,036.21	12.55	12.74	167.11	-203.67	8,183.89	8,294.12	8,269.07	25.05	331.061			
5,800.00	5,796.38	6,136.01	6,132.56	12.78	12.95	167.08	-197.93	8,180.06	8,296.67	8,271.19	25.48	325.607			
5,900.00	5,896.15	6,247.40	6,243.68	13.01	13.19	167.05	-191.63	8,175.57	8,299.17	8,273.24	25.93	320.014			
6,000.00	5,995.91	6,341.73	6,337.80	13.24	13.40	167.03	-186.66	8,171.65	8,301.56	8,275.20	26.36	314.962			
6,100.00	6,095.67	6,400.00	6,395.96	13.47	13.53	167.02	-183.87	8,169.34	8,304.22	8,277.50	26.72	310.827			
6,200.00	6,195.44	6,476.33	6,472.16	13.70	13.70	167.00	-180.45	8,166.62	8,307.24	8,280.14	27.11	306.469			
6,300.00	6,295.20	6,533.29	6,529.04	13.93	13.82	166.99	-178.00	8,164.87	8,310.76	8,283.30	27.46	302.628			
6,400.00	6,394.97	6,600.00	6,595.68	14.17	13.97	166.98	-175.31	8,163.24	8,314.85	8,287.01	27.83	298.721			
6,500.00	6,494.73	6,634.24	6,629.88	14.40	14.04	166.98	-173.99	8,162.60	8,319.48	8,291.33	28.15	295.545			
6,600.00	6,594.50	6,700.00	6,695.59	14.63	14.18	166.97	-171.52	8,161.86	8,324.84	8,296.32	28.52	291.891			
6,700.00	6,694.26	6,728.03	6,723.60	14.87	14.24	166.96	-170.48	8,161.72	8,330.73	8,301.91	28.82	289.031			
6,800.00	6,794.03	6,800.00	6,795.53	15.10	14.39	166.95	-167.85	8,161.77	8,337.32	8,308.12	29.20	285.481			
6,900.00	6,893.79	6,857.96	6,853.45	15.34	14.51	166.94	-165.79	8,162.05	8,344.29	8,314.73	29.56	282.280			
7,000.00	6,993.56	6,959.50	6,954.93	15.57	14.72	166.93	-162.28	8,162.54	8,351.37	8,321.37	30.00	278.419			
7,100.00	7,093.32	7,076.20	7,071.56	15.81	14.97	166.92	-158.43	8,163.00	8,358.36	8,327.90	30.46	274.409			
7,200.00	7,193.09	7,188.29	7,183.61	16.04	15.21	166.91	-155.19	8,163.18	8,365.13	8,334.21	30.92	270.585			
7,300.00	7,292.85	7,291.94	7,287.23	16.28	15.42	166.90	-153.15	8,163.24	8,371.81	8,340.46	31.35	267.017			
7,400.00	7,392.62	7,391.53	7,386.81	16.52	15.63	166.90	-151.77	8,163.25	8,378.47	8,346.69	31.78	263.607			
7,500.00	7,492.38	7,536.13	7,531.40	16.76	15.93	166.91	-149.82	8,163.00	8,384.97	8,352.68	32.29	259.659			
7,600.00	7,592.15	7,887.87	7,883.02	16.99	16.69	166.92	-146.01	8,155.46	8,389.18	8,356.03	33.15	253.036			
7,615.05	7,607.16	7,906.91	7,902.05	17.03	16.73	166.92	-145.74	8,154.78	8,389.64	8,356.42	33.23	252.488			
7,700.00	7,691.95	7,980.54	7,975.63	17.21	16.89	166.92	-144.77	8,152.20	8,391.71	8,358.15	33.56	250.068			
7,800.00	7,791.85	8,058.79	8,053.83	17.40	17.06	166.93	-143.90	8,149.60	8,392.75	8,358.85	33.91	247.516			
7,900.00	7,891.81	8,128.10	8,123.11	17.58	17.21	166.93	-143.35	8,147.50	8,392.40	8,358.15	34.25	245.038			
8,008.20	8,000.00	8,200.00	8,194.98	17.78	17.36	91.40	-143.37	8,145.65	8,390.60	8,355.98	34.62	242.363			
8,100.00	8,091.80	8,200.00	8,194.98	17.96	17.36	91.40	-143.37	8,145.65	8,388.89	8,354.03	34.86	240.633			
8,200.00	8,191.80	8,254.54	8,249.51	18.17	17.47	91.41	-143.95	8,144.80	8,387.58	8,352.36	35.22	238.162			
8,300.00	8,291.80	8,300.00	8,294.96	18.39	17.56	91.41	-144.89	8,144.72	8,387.27	8,351.71	35.56	235.854			
8,310.06	8,301.86	8,300.00	8,294.96	18.41	17.56	91.41	-144.89	8,144.72	8,387.27	8,351.68	35.59	235.669			
8,328.31	8,320.11	8,300.00	8,294.96	18.45	17.56	91.41	-144.89	8,144.72	8,387.29	8,351.65	35.64	235.335			
8,350.00	8,341.80	8,300.00	8,294.96	18.49	17.56	1.41	-144.89	8,144.72	8,386.95	8,351.26	35.70	234.954			
8,400.00	8,391.61	8,344.68	8,339.63	18.58	17.65	1.43	-146.05	8,144.92	8,383.15	8,347.27	35.88	233.640			
8,450.00	8,440.89	8,391.46	8,386.39	18.65	17.74	1.46	-147.34	8,145.15	8,375.03	8,338.96	36.07	232.215			
8,500.00	8,489.24	8,469.16	8,464.06	18.72	17.90	1.52	-149.44	8,145.42	8,362.58	8,326.29	36.29	230.423			
8,550.00	8,536.31	8,550.82	8,545.69	18.78	18.06	1.58	-151.36	8,145.38	8,345.77	8,309.25	36.52	228.528			
8,600.00	8,581.73	8,618.95	8,613.81	18.84	18.20	1.67	-152.92	8,145.10	8,324.74	8,288.02	36.72	226.696			
8,650.00	8,625.16	8,667.85	8,662.69	18.91	18.30	1.77	-154.04	8,144.82	8,299.79	8,262.90	36.89	224.981			
8,700.00	8,666.27	8,715.46	8,710.29	18.98	18.40	1.90	-155.14	8,144.52	8,271.13	8,234.08	37.05	223.235			
8,750.00	8,704.75	8,762.90	8,757.72	19.07	18.50	2.06	-156.19	8,144.17	8,238.98	8,201.78	37.20	221.458			
8,800.00	8,740.30	8,806.92	8,801.72	19.20	18.59	2.27	-157.14	8,143.81	8,203.58	8,166.24	37.34	219.685			
8,850.00	8,772.65	8,848.43	8,843.23	19.36	18.67	2.55	-157.99	8,143.41	8,165.20	8,127.73	37.47	217.914			
8,900.00	8,801.55	8,885.33	8,880.12	19.57	18.75	2.92	-158.73	8,143.02	8,124.15	8,086.57	37.58	216.170			
8,950.00	8,826.79	8,916.00	8,910.78	19.85	18.82	3.43	-159.32	8,142.67	8,080.75	8,043.07	37.68	214.473			
9,000.00	8,848.18	8,940.85	8,935.62	20.18	18.87	4.19	-159.79	8,142.38	8,035.35	7,997.59	37.76	212.825			

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Parkway West (Offsets) - 16 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-MWD-ISCWSA												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	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)					
9,050.00	8,865.55	8,960.84	8,955.60	20.59	18.91	5.39	-160.16	8,142.13	7,988.29	7,950.47	37.82	211.226	
9,100.00	8,878.76	8,975.82	8,970.59	21.06	18.94	7.60	-160.44	8,141.93	7,939.95	7,902.08	37.87	209.683	
9,150.00	8,887.72	8,985.71	8,980.47	21.60	18.96	12.85	-160.61	8,141.81	7,890.68	7,852.78	37.90	208.201	
9,200.00	8,892.37	8,990.44	8,985.20	22.20	18.97	37.76	-160.70	8,141.74	7,840.88	7,802.96	37.92	206.785	
9,219.71	8,893.00	8,990.89	8,985.65	22.45	18.97	85.43	-160.71	8,141.74	7,821.18	7,783.26	37.92	206.243	
9,300.00	8,894.21	8,991.05	8,985.81	23.72	18.97	85.47	-160.71	8,141.74	7,740.93	7,698.35	42.58	181.807	
9,400.00	8,895.71	8,991.26	8,986.02	23.80	18.97	85.53	-160.71	8,141.73	7,640.97	7,598.31	42.66	179.126	
9,500.00	8,897.21	8,991.47	8,986.23	23.88	18.97	85.58	-160.72	8,141.73	7,541.01	7,498.27	42.74	176.450	
9,600.00	8,898.71	8,991.68	8,986.44	23.96	18.97	85.63	-160.72	8,141.73	7,441.06	7,398.24	42.82	173.780	
9,700.00	8,900.21	8,991.88	8,986.64	24.04	18.97	85.68	-160.72	8,141.72	7,341.10	7,298.20	42.90	171.116	
9,800.00	8,901.71	8,992.09	8,986.85	24.14	18.97	85.74	-160.73	8,141.72	7,241.15	7,198.16	42.98	168.458	
9,900.00	8,903.21	8,992.29	8,987.05	24.26	18.97	85.79	-160.73	8,141.72	7,141.20	7,098.13	43.07	165.806	
10,000.00	8,904.72	8,992.50	8,987.25	24.50	18.98	85.84	-160.73	8,141.72	7,041.25	6,998.09	43.16	163.160	
10,100.00	8,906.22	8,992.70	8,987.46	24.88	18.98	85.89	-160.74	8,141.71	6,941.30	6,898.06	43.24	160.521	
10,200.00	8,907.72	8,992.90	8,987.66	25.32	18.98	85.94	-160.74	8,141.71	6,841.35	6,798.02	43.33	157.889	
10,300.00	8,909.22	8,993.10	8,987.86	25.80	18.98	86.00	-160.75	8,141.71	6,741.40	6,697.98	43.42	155.263	
10,400.00	8,910.72	8,993.30	8,988.06	26.33	18.98	86.05	-160.75	8,141.71	6,641.46	6,597.95	43.51	152.645	
10,500.00	8,912.22	8,993.50	8,988.25	26.89	18.98	86.10	-160.75	8,141.70	6,541.52	6,497.92	43.60	150.034	
10,600.00	8,913.72	8,993.69	8,988.45	27.49	18.98	86.15	-160.76	8,141.70	6,441.58	6,397.88	43.69	147.430	
10,700.00	8,915.22	8,993.89	8,988.65	28.12	18.98	86.20	-160.76	8,141.70	6,341.64	6,297.85	43.79	144.833	
10,800.00	8,916.72	8,994.09	8,988.84	28.77	18.98	86.25	-160.76	8,141.69	6,241.70	6,197.82	43.88	142.245	
10,900.00	8,918.22	8,994.28	8,989.04	29.46	18.98	86.30	-160.77	8,141.69	6,141.77	6,097.79	43.98	139.664	
11,000.00	8,919.72	8,994.47	8,989.23	30.17	18.98	86.35	-160.77	8,141.69	6,041.83	5,997.76	44.07	137.091	
11,100.00	8,921.23	8,994.67	8,989.43	30.91	18.98	86.40	-160.77	8,141.69	5,941.90	5,897.73	44.17	134.526	
11,200.00	8,922.73	8,994.86	8,989.62	31.67	18.98	86.45	-160.78	8,141.68	5,841.97	5,797.71	44.27	131.970	
11,300.00	8,924.23	8,995.05	8,989.81	32.45	18.98	86.50	-160.78	8,141.68	5,742.05	5,697.68	44.37	129.421	
11,400.00	8,925.73	8,995.24	8,990.00	33.25	18.98	86.55	-160.78	8,141.68	5,642.12	5,597.66	44.47	126.882	
11,500.00	8,927.23	8,995.43	8,990.19	34.06	18.98	86.59	-160.79	8,141.68	5,542.20	5,497.64	44.57	124.350	
11,600.00	8,928.73	8,995.62	8,990.38	34.90	18.98	86.64	-160.79	8,141.67	5,442.29	5,397.61	44.67	121.828	
11,700.00	8,930.23	8,995.81	8,990.57	35.75	18.98	86.69	-160.79	8,141.67	5,342.37	5,297.60	44.78	119.314	
11,800.00	8,931.73	8,996.00	8,990.75	36.61	18.98	86.74	-160.80	8,141.67	5,242.46	5,197.58	44.88	116.809	
11,900.00	8,933.23	8,996.18	8,990.94	37.49	18.98	86.79	-160.80	8,141.67	5,142.55	5,097.57	44.99	114.313	
11,937.88	8,933.80	8,996.25	8,991.01	37.82	18.98	86.80	-160.80	8,141.67	5,104.71	5,059.68	45.03	113.370	
12,000.00	8,934.73	8,996.36	8,991.12	38.38	18.98	87.46	-160.80	8,141.66	5,042.67	4,997.57	45.09	111.826	
12,100.00	8,936.24	8,996.51	8,991.27	39.28	18.98	88.10	-160.81	8,141.66	4,942.88	4,897.67	45.20	109.346	
12,200.00	8,937.74	8,996.62	8,991.38	40.19	18.98	88.48	-160.81	8,141.66	4,843.22	4,797.91	45.32	106.875	
12,300.00	8,939.24	8,996.70	8,991.46	41.11	18.98	88.74	-160.81	8,141.66	4,743.75	4,698.32	45.43	104.411	
12,400.00	8,940.74	8,996.75	8,991.51	42.03	18.98	88.93	-160.81	8,141.66	4,644.51	4,598.95	45.55	101.955	
12,491.82	8,942.12	8,996.77	8,991.52	42.89	18.98	89.06	-160.81	8,141.66	4,553.81	4,507.94	45.67	99.706	
12,500.00	8,942.24	8,996.77	8,991.52	42.96	18.98	89.06	-160.81	8,141.66	4,545.53	4,499.85	45.68	99.506	
12,600.00	8,943.75	8,996.77	8,991.53	43.90	18.98	89.06	-160.81	8,141.66	4,446.70	4,400.89	45.81	97.061	
12,700.00	8,945.25	8,996.77	8,991.53	44.84	18.98	89.06	-160.81	8,141.66	4,347.93	4,301.98	45.95	94.622	
12,800.00	8,946.75	8,996.77	8,991.53	45.80	18.98	89.06	-160.81	8,141.66	4,249.22	4,203.13	46.09	92.187	
12,900.00	8,948.25	8,996.77	8,991.53	46.76	18.98	89.06	-160.81	8,141.66	4,150.57	4,104.33	46.24	89.757	
13,000.00	8,949.75	8,996.77	8,991.53	47.72	18.98	89.06	-160.81	8,141.66	4,051.98	4,005.59	46.40	87.333	
13,100.00	8,951.25	8,996.77	8,991.53	48.70	18.98	89.06	-160.81	8,141.66	3,953.47	3,906.91	46.56	84.913	
13,200.00	8,952.75	8,996.77	8,991.53	49.67	18.98	89.06	-160.81	8,141.66	3,855.03	3,808.30	46.73	82.498	
13,300.00	8,954.25	8,996.77	8,991.53	50.66	18.98	89.06	-160.81	8,141.66	3,756.68	3,709.77	46.91	80.087	
13,400.00	8,955.75	8,996.78	8,991.53	51.65	18.98	89.06	-160.81	8,141.66	3,658.41	3,611.31	47.10	77.680	
13,500.00	8,957.25	8,996.78	8,991.53	52.64	18.98	89.06	-160.81	8,141.66	3,560.24	3,512.95	47.29	75.278	
13,600.00	8,958.75	8,996.78	8,991.54	53.64	18.98	89.06	-160.81	8,141.66	3,462.18	3,414.67	47.51	72.880	
13,700.00	8,960.26	8,996.78	8,991.54	54.64	18.98	89.06	-160.81	8,141.66	3,364.23	3,316.50	47.73	70.485	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design														Offset Site Error:	0.00 usft
Survey Program: 100-MWD-ISCWSA														Offset Well Error:	0.00 usft
Parkway West (Offsets) - 16 - OH - OH															
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				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)	Minimum Separation (usft)	Separation Factor			
13,800.00	8,961.76	8,996.78	8,991.54	55.64	18.98	89.06	-160.81	8,141.66	3,266.40	3,218.43	47.97	68.094			
13,900.00	8,963.26	8,996.78	8,991.54	56.65	18.98	89.06	-160.81	8,141.66	3,168.71	3,120.48	48.23	65.707			
14,000.00	8,964.76	8,996.78	8,991.54	57.67	18.98	89.06	-160.81	8,141.66	3,071.17	3,022.67	48.50	63.322			
14,100.00	8,966.26	8,996.78	8,991.54	58.69	18.98	89.06	-160.81	8,141.66	2,973.79	2,924.99	48.80	60.941			
14,200.00	8,967.76	8,996.78	8,991.54	59.71	18.98	89.06	-160.81	8,141.66	2,876.59	2,827.47	49.12	58.564			
14,211.82	8,967.94	8,996.78	8,991.54	59.83	18.98	89.06	-160.81	8,141.66	2,865.11	2,815.95	49.16	58.283			
14,300.00	8,969.26	8,996.80	8,991.55	60.73	18.98	88.98	-160.81	8,141.66	2,779.42	2,729.96	49.46	56.193			
14,400.00	8,970.77	8,996.85	8,991.60	61.76	18.98	88.88	-160.81	8,141.66	2,682.05	2,632.23	49.82	53.837			
14,500.00	8,972.28	8,996.93	8,991.69	62.80	18.98	88.78	-160.81	8,141.66	2,584.47	2,534.29	50.19	51.498			
14,600.00	8,973.79	8,997.04	8,991.80	63.84	18.98	88.67	-160.82	8,141.66	2,486.70	2,436.14	50.56	49.179			
14,700.00	8,975.30	8,997.19	8,991.95	64.88	18.99	88.54	-160.82	8,141.65	2,388.74	2,337.79	50.95	46.882			
14,765.09	8,976.29	8,997.31	8,992.07	65.56	18.99	88.46	-160.82	8,141.65	2,324.88	2,273.67	51.21	45.399			
14,800.00	8,976.82	8,997.37	8,992.13	65.92	18.99	88.47	-160.82	8,141.65	2,290.62	2,239.27	51.35	44.607			
14,900.00	8,978.33	8,997.56	8,992.32	66.97	18.99	88.49	-160.82	8,141.65	2,192.59	2,140.81	51.78	42.345			
15,000.00	8,979.85	8,997.75	8,992.51	68.02	18.99	88.52	-160.83	8,141.65	2,094.75	2,042.50	52.25	40.090			
15,100.00	8,981.36	8,997.94	8,992.69	69.08	18.99	88.54	-160.83	8,141.64	1,997.12	1,944.35	52.77	37.844			
15,200.00	8,982.88	8,998.12	8,992.88	70.13	18.99	88.56	-160.83	8,141.64	1,899.74	1,846.38	53.35	35.608			
15,300.00	8,984.39	8,998.31	8,993.06	71.19	18.99	88.59	-160.84	8,141.64	1,802.64	1,748.64	54.00	33.381			
15,400.00	8,985.91	8,998.49	8,993.25	72.25	18.99	88.61	-160.84	8,141.64	1,705.88	1,651.14	54.74	31.166			
15,500.00	8,987.42	8,998.67	8,993.43	73.31	18.99	88.64	-160.84	8,141.63	1,609.52	1,553.95	55.57	28.964			
15,600.00	8,988.94	8,998.85	8,993.61	74.37	18.99	88.66	-160.85	8,141.63	1,513.62	1,457.10	56.53	26.776			
15,700.00	8,990.45	8,999.04	8,993.79	75.44	18.99	88.68	-160.85	8,141.63	1,418.30	1,360.66	57.64	24.607			
15,800.00	8,991.97	8,999.22	8,993.97	76.50	18.99	88.71	-160.85	8,141.63	1,323.67	1,264.73	58.93	22.461			
15,900.00	8,993.48	8,999.40	8,994.15	77.57	18.99	88.73	-160.86	8,141.62	1,229.88	1,169.43	60.45	20.344			
16,000.00	8,995.00	8,999.58	8,994.33	78.64	18.99	88.75	-160.86	8,141.62	1,137.16	1,074.89	62.26	18.264			
16,100.00	8,996.51	8,999.75	8,994.51	79.71	18.99	88.78	-160.86	8,141.62	1,045.77	981.34	64.43	16.231			
16,200.00	8,998.03	8,999.93	8,994.69	80.78	18.99	88.80	-160.87	8,141.62	956.11	889.07	67.05	14.260			
16,300.00	8,999.54	9,000.11	8,994.86	81.85	18.99	88.82	-160.87	8,141.61	868.72	798.49	70.22	12.371			
16,400.00	9,001.06	9,000.28	8,995.04	82.93	18.99	88.84	-160.87	8,141.61	784.34	710.25	74.09	10.586			
16,500.00	9,002.57	9,000.45	8,995.21	84.00	18.99	88.87	-160.88	8,141.61	704.06	625.27	78.79	8.936			
16,528.18	9,003.00	9,000.50	8,995.26	84.30	18.99	88.87	-160.88	8,141.61	682.38	602.11	80.27	8.501	CC, ES, SF		

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Parkway West (Offsets) - Unit 28 3 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 100-MWD-ISCWSA													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Hightide Toolface (")	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	
0.00	0.00	0.00	0.00	0.00	0.00	89.55	49.73	6,286.79	6,286.99					
100.00	100.00	59.70	59.70	0.09	0.05	89.55	49.61	6,286.94	6,287.21	6,287.07	0.14	N/A		
200.00	200.00	136.57	136.56	0.31	0.17	89.55	49.14	6,287.52	6,287.95	6,287.47	0.48	N/A		
300.00	300.00	224.60	224.59	0.54	0.36	89.56	48.55	6,288.34	6,288.88	6,287.98	0.90	6,993.488		
400.00	400.00	300.00	299.98	0.76	0.53	89.56	48.30	6,289.29	6,290.14	6,288.85	1.29	4,881.258		
500.00	500.00	383.91	383.88	0.99	0.71	89.56	48.40	6,290.63	6,291.73	6,290.04	1.69	3,715.479		
600.00	600.00	483.64	483.60	1.21	0.92	89.55	48.91	6,292.35	6,293.46	6,291.33	2.13	2,956.428		
700.00	700.00	599.82	599.75	1.43	1.16	89.55	49.72	6,294.19	6,295.05	6,292.47	2.59	2,433.339		
800.00	800.00	684.41	684.34	1.66	1.33	89.54	50.33	6,295.52	6,296.63	6,293.64	2.99	2,108.309		
900.00	900.00	784.59	784.50	1.88	1.55	89.54	51.08	6,297.23	6,298.34	6,294.92	3.42	1,840.520		
1,000.00	1,000.00	874.23	874.12	2.11	1.74	89.53	51.79	6,298.80	6,300.10	6,296.26	3.84	1,642.173		
1,100.00	1,100.00	965.50	965.37	2.33	1.94	89.52	52.56	6,300.56	6,302.04	6,297.78	4.26	1,479.586		
1,200.00	1,200.00	1,060.10	1,059.95	2.56	2.14	89.51	53.45	6,302.49	6,304.08	6,299.39	4.69	1,345.109		
1,300.00	1,300.00	1,155.37	1,155.19	2.78	2.34	89.51	54.14	6,304.50	6,306.20	6,301.09	5.11	1,234.603		
1,400.00	1,400.00	1,257.47	1,257.27	3.01	2.55	89.51	54.40	6,306.71	6,308.36	6,302.82	5.54	1,138.979		
1,500.00	1,500.00	1,356.83	1,356.61	3.23	2.76	89.50	54.61	6,308.79	6,310.46	6,304.49	5.97	1,057.495		
1,600.00	1,600.00	1,466.73	1,466.48	3.46	2.99	89.50	54.81	6,311.10	6,312.57	6,306.15	6.42	983.005		
1,700.00	1,700.00	1,559.27	1,559.00	3.68	3.18	89.50	54.54	6,312.92	6,314.54	6,307.70	6.84	923.205		
1,800.00	1,800.00	1,642.89	1,642.60	3.91	3.36	89.51	54.22	6,314.79	6,316.77	6,309.53	7.24	872.379		
1,900.00	1,900.00	1,725.76	1,725.44	4.13	3.54	89.51	53.52	6,316.84	6,319.24	6,311.60	7.64	826.957		
2,000.00	2,000.00	1,800.00	1,799.65	4.36	3.70	89.52	52.50	6,318.93	6,322.05	6,314.02	8.02	787.982		
2,100.00	2,100.00	1,896.75	1,896.34	4.58	3.91	89.54	50.81	6,321.88	6,325.08	6,316.63	8.45	748.129		
2,200.00	2,200.00	1,994.79	1,994.32	4.81	4.12	89.56	49.10	6,324.92	6,328.18	6,319.29	8.89	712.118		
2,300.00	2,300.00	2,172.16	2,171.60	5.03	4.49	89.59	45.34	6,329.27	6,330.56	6,321.09	9.48	668.013		
2,400.00	2,400.00	2,314.53	2,313.91	5.26	4.79	89.62	42.31	6,331.46	6,332.07	6,322.08	9.99	633.531		
2,500.00	2,500.00	2,421.90	2,421.25	5.48	5.01	89.63	40.37	6,332.79	6,333.30	6,322.86	10.44	606.441		
2,600.00	2,600.00	2,556.58	2,555.92	5.71	5.29	89.65	38.54	6,333.76	6,333.97	6,323.02	10.95	578.422		
2,700.00	2,700.00	2,652.77	2,652.10	5.93	5.49	89.66	37.21	6,334.32	6,334.55	6,323.17	11.38	556.777		
2,800.00	2,800.00	2,748.08	2,747.40	6.15	5.69	89.68	35.91	6,334.95	6,335.21	6,323.40	11.80	536.717		
2,900.00	2,900.00	2,846.59	2,845.90	6.38	5.90	89.68	34.89	6,335.66	6,335.92	6,323.68	12.24	517.792		
3,000.00	3,000.00	2,956.49	2,955.80	6.60	6.13	89.69	34.21	6,336.40	6,336.59	6,323.90	12.69	499.276		
3,100.00	3,100.00	3,086.89	3,086.19	6.83	6.40	89.70	33.45	6,336.85	6,336.94	6,323.75	13.19	480.555		
3,200.00	3,200.00	3,206.11	3,205.41	7.05	6.65	89.71	32.54	6,336.74	6,336.84	6,323.18	13.66	463.950		
3,300.00	3,300.00	3,308.47	3,307.76	7.28	6.86	89.71	31.69	6,336.50	6,336.60	6,322.50	14.10	449.515		
3,400.00	3,400.00	3,412.87	3,412.16	7.50	7.07	89.72	30.73	6,336.18	6,336.29	6,321.75	14.54	435.792		
3,500.00	3,500.00	3,506.91	3,506.20	7.73	7.27	89.73	29.83	6,335.92	6,336.01	6,321.04	14.96	423.477		
3,600.00	3,600.00	3,602.42	3,601.71	7.95	7.47	89.74	28.91	6,335.73	6,335.81	6,320.42	15.39	411.755		
3,700.00	3,700.00	3,717.18	3,716.46	8.18	7.71	89.75	27.87	6,335.41	6,335.52	6,319.67	15.85	399.673		
3,800.00	3,800.00	3,826.89	3,826.16	8.40	7.93	89.76	26.74	6,334.86	6,335.01	6,318.71	16.31	388.518		
3,900.00	3,900.00	3,924.27	3,923.53	8.63	8.14	89.76	25.98	6,334.36	6,334.50	6,317.76	16.73	378.529		
4,000.00	4,000.00	4,029.84	4,029.10	8.85	8.36	89.77	25.27	6,333.77	6,333.94	6,316.76	17.18	368.683		
4,036.54	4,036.54	4,067.45	4,066.70	8.93	8.43	165.29	25.04	6,333.54	6,333.83	6,316.49	17.34	365.342		
4,100.00	4,100.00	4,134.80	4,134.06	9.07	8.57	165.30	24.68	6,333.11	6,334.15	6,316.54	17.61	359.624		
4,200.00	4,199.96	4,243.26	4,242.51	9.27	8.80	165.30	24.21	6,332.30	6,335.93	6,317.89	18.04	351.139		
4,300.00	4,299.86	4,353.75	4,352.99	9.48	9.03	165.31	23.79	6,331.33	6,339.27	6,320.79	18.48	343.031		
4,393.15	4,392.85	4,465.23	4,464.47	9.67	9.27	165.32	23.60	6,330.09	6,343.69	6,324.79	18.90	335.565		
4,400.00	4,399.68	4,473.71	4,472.95	9.69	9.28	165.32	23.59	6,329.98	6,344.06	6,325.12	18.94	335.018		
4,500.00	4,499.44	4,579.58	4,578.81	9.90	9.51	165.34	23.49	6,328.53	6,349.32	6,329.95	19.37	327.851		
4,600.00	4,599.20	4,684.47	4,683.69	10.11	9.73	165.35	23.43	6,327.04	6,354.53	6,334.74	19.80	320.998		
4,700.00	4,698.97	4,785.18	4,784.39	10.33	9.94	165.37	23.45	6,325.55	6,359.69	6,339.47	20.22	314.559		
4,800.00	4,798.73	4,882.23	4,881.42	10.55	10.14	165.38	23.45	6,324.13	6,364.86	6,344.23	20.63	308.537		
4,900.00	4,898.50	4,972.66	4,971.85	10.76	10.32	165.40	23.46	6,322.88	6,370.13	6,349.10	21.03	302.948		

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
 Project: Eddy County, NM (NAD-83)
 Reference Site: Onyx PWU 29-28
 Site Error: 0.00 usft
 Reference Well: 62H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
 TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Multi User Db
 Offset TVD Reference: Offset Datum

Offset Design														Parkway West (Offsets) - Unit 28 3 - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 100-MWD-ISCWSA																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					
5,000.00	4,998.26	5,061.29	5,060.48	10.98	10.51	165.41	23.76	6,321.81	6,375.56	6,354.14	21.43	297.573					
5,100.00	5,098.03	5,156.29	5,155.46	11.20	10.71	165.42	24.57	6,320.81	6,381.14	6,359.31	21.84	292.208					
5,200.00	5,197.79	5,255.11	5,254.27	11.43	10.92	165.42	25.66	6,319.79	6,386.75	6,364.49	22.26	286.929					
5,300.00	5,297.56	5,349.05	5,348.20	11.65	11.11	165.42	26.89	6,318.85	6,392.39	6,369.72	22.67	281.973					
5,400.00	5,397.32	5,450.95	5,450.09	11.87	11.32	165.43	28.06	6,317.94	6,398.13	6,375.04	23.09	277.057					
5,500.00	5,497.09	5,578.30	5,577.42	12.10	11.58	165.44	29.14	6,316.47	6,403.63	6,380.06	23.57	271.736					
5,600.00	5,596.85	5,690.73	5,689.83	12.33	11.82	165.44	30.93	6,314.76	6,408.75	6,384.73	24.02	266.853					
5,700.00	5,696.62	5,777.98	5,777.06	12.55	12.00	165.44	32.22	6,313.45	6,413.88	6,389.47	24.41	262.731					
5,800.00	5,796.38	5,880.90	5,879.96	12.78	12.21	165.45	33.51	6,312.02	6,419.14	6,394.30	24.84	258.415					
5,900.00	5,896.15	5,978.24	5,977.29	13.01	12.41	165.45	34.68	6,310.62	6,424.34	6,399.08	25.26	254.330					
6,000.00	5,995.91	6,076.60	6,075.63	13.24	12.62	165.46	35.91	6,309.26	6,429.60	6,403.92	25.68	250.360					
6,100.00	6,095.67	6,164.76	6,163.77	13.47	12.80	165.46	37.05	6,308.10	6,434.93	6,408.85	26.09	246.684					
6,200.00	6,195.44	6,274.81	6,273.80	13.70	13.03	165.46	39.12	6,306.78	6,440.38	6,413.85	26.53	242.748					
6,300.00	6,295.20	6,388.90	6,387.84	13.93	13.27	165.45	41.73	6,305.09	6,445.53	6,418.54	26.99	238.804					
6,400.00	6,394.97	6,483.50	6,482.40	14.17	13.47	165.44	44.17	6,303.82	6,450.63	6,423.21	27.41	235.337					
6,500.00	6,494.73	6,584.29	6,583.14	14.40	13.69	165.44	46.99	6,302.12	6,455.78	6,427.93	27.84	231.864					
6,600.00	6,594.50	6,699.48	6,698.26	14.63	13.93	165.42	50.17	6,300.26	6,460.80	6,432.50	28.31	228.255					
6,700.00	6,694.26	6,780.84	6,779.59	14.87	14.10	165.42	52.23	6,298.95	6,465.84	6,437.15	28.69	225.340					
6,800.00	6,794.03	6,888.35	6,887.06	15.10	14.32	165.41	54.67	6,297.36	6,471.01	6,441.88	29.14	222.094					
6,900.00	6,893.79	6,986.42	6,985.10	15.34	14.52	165.41	56.78	6,295.82	6,476.08	6,446.52	29.56	219.079					
7,000.00	6,993.56	7,077.57	7,076.22	15.57	14.71	165.41	58.58	6,294.46	6,481.23	6,451.26	29.97	216.253					
7,100.00	7,093.32	7,178.79	7,177.41	15.81	14.92	165.41	60.20	6,293.04	6,486.47	6,456.07	30.40	213.373					
7,200.00	7,193.09	7,281.63	7,280.24	16.04	15.13	165.42	61.22	6,291.53	6,491.64	6,460.81	30.83	210.541					
7,300.00	7,292.85	7,371.06	7,369.66	16.28	15.31	165.43	61.55	6,290.26	6,496.87	6,465.62	31.25	207.927					
7,400.00	7,392.62	7,450.56	7,449.16	16.52	15.48	165.44	61.50	6,289.32	6,502.32	6,470.68	31.65	205.476					
7,500.00	7,492.38	7,524.78	7,523.38	16.76	15.63	165.45	61.48	6,288.71	6,508.14	6,476.11	32.04	203.144					
7,600.00	7,592.15	7,600.00	7,598.59	16.99	15.79	165.46	61.67	6,288.43	6,514.39	6,481.96	32.43	200.869					
7,615.05	7,607.16	7,600.00	7,598.59	17.03	15.79	165.46	61.67	6,288.43	6,515.37	6,482.90	32.47	200.634					
7,700.00	7,691.95	7,669.04	7,667.63	17.21	15.93	165.48	62.09	6,288.46	6,520.45	6,487.65	32.80	198.786					
7,800.00	7,791.85	7,766.71	7,765.30	17.40	16.14	165.49	62.97	6,288.78	6,525.15	6,491.95	33.19	196.578					
7,900.00	7,891.81	7,872.19	7,870.77	17.58	16.36	165.50	63.96	6,289.00	6,528.03	6,494.43	33.60	194.299					
8,008.20	8,000.00	7,974.21	7,972.78	17.78	16.57	89.97	64.88	6,289.22	6,529.25	6,495.24	34.01	191.956					
8,100.00	8,091.80	8,054.07	8,052.65	17.96	16.74	89.97	65.54	6,289.51	6,529.58	6,495.21	34.37	189.964					
8,200.00	8,191.80	8,137.14	8,135.71	18.17	16.91	89.96	66.16	6,290.00	6,530.17	6,495.39	34.78	187.778					
8,300.00	8,291.80	8,219.44	8,218.01	18.39	17.08	89.96	66.79	6,290.71	6,531.03	6,495.86	35.18	185.651					
8,328.31	8,320.11	8,244.06	8,242.62	18.45	17.14	89.96	66.98	6,290.96	6,531.32	6,496.03	35.29	185.050					
8,350.00	8,341.80	8,262.93	8,261.49	18.49	17.18	-0.05	67.11	6,291.16	6,531.15	6,495.77	35.38	184.598					
8,400.00	8,391.61	8,308.33	8,306.89	18.58	17.27	-0.05	67.42	6,291.68	6,527.65	6,492.07	35.57	183.513					
8,450.00	8,440.89	8,365.16	8,363.71	18.65	17.39	-0.05	67.65	6,292.31	6,519.79	6,484.02	35.77	182.253					
8,500.00	8,489.24	8,421.78	8,420.32	18.72	17.51	-0.05	67.71	6,292.87	6,507.62	6,471.64	35.97	180.910					
8,550.00	8,536.31	8,478.21	8,476.75	18.78	17.63	-0.06	67.79	6,293.35	6,491.19	6,455.03	36.16	179.492					
8,600.00	8,581.73	8,530.07	8,528.62	18.84	17.73	-0.06	67.92	6,293.72	6,470.66	6,434.32	36.35	178.034					
8,650.00	8,625.16	8,578.02	8,576.56	18.91	17.84	-0.06	68.06	6,294.04	6,446.20	6,409.69	36.51	176.541					
8,700.00	8,666.27	8,618.81	8,617.36	18.98	17.92	-0.07	68.18	6,294.28	6,418.02	6,381.35	36.67	175.041					
8,750.00	8,704.75	8,653.02	8,651.56	19.07	17.99	-0.08	68.30	6,294.51	6,386.36	6,349.56	36.80	173.536					
8,800.00	8,740.30	8,684.69	8,683.23	19.20	18.06	-0.08	68.41	6,294.74	6,351.48	6,314.56	36.93	172.008					
8,850.00	8,772.65	8,748.80	8,747.34	19.36	18.19	-0.10	68.69	6,295.11	6,313.59	6,276.51	37.08	170.273					
8,900.00	8,801.55	8,800.00	8,798.54	19.57	18.30	-0.12	69.02	6,295.10	6,272.79	6,235.58	37.21	168.593					
8,950.00	8,826.79	8,822.20	8,820.74	19.85	18.35	-0.14	69.17	6,295.06	6,229.60	6,192.31	37.29	167.052					
9,000.00	8,848.18	8,834.79	8,833.33	20.18	18.37	-0.17	69.25	6,295.07	6,184.43	6,147.08	37.36	165.556					
9,050.00	8,865.55	8,845.08	8,843.62	20.59	18.40	-0.22	69.31	6,295.08	6,137.59	6,100.18	37.41	164.075					
9,100.00	8,878.76	8,852.98	8,851.52	21.06	18.41	-0.31	69.36	6,295.10	6,089.42	6,051.97	37.45	162.616					

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PVU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Parkway West (Offsets) - Unit 28 3 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-MWD-ISCWSA												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	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)					
9,150.00	8,887.72	8,858.40	8,856.94	21.60	18.42	-0.50	69.39	6,295.12	6,040.27	6,002.80	37.47	161.185	
9,200.00	8,892.37	8,861.28	8,859.82	22.20	18.43	-1.33	69.40	6,295.13	5,990.52	5,953.03	37.49	159.789	
9,219.71	8,893.00	8,861.70	8,860.24	22.45	18.43	-3.74	69.40	6,295.13	5,970.83	5,933.33	37.49	159.247	
9,300.00	8,894.21	8,862.62	8,861.16	23.72	18.43	-3.78	69.41	6,295.14	5,890.55	5,848.33	42.22	139.504	
9,400.00	8,895.71	8,863.78	8,862.31	23.80	18.44	-3.82	69.41	6,295.14	5,790.57	5,748.26	42.31	136.869	
9,500.00	8,897.21	8,864.95	8,863.49	23.88	18.44	-3.86	69.42	6,295.15	5,690.59	5,648.20	42.39	134.241	
9,600.00	8,898.71	8,866.14	8,864.67	23.96	18.44	-3.91	69.43	6,295.15	5,590.61	5,548.13	42.48	131.620	
9,700.00	8,900.21	8,867.34	8,865.88	24.04	18.44	-3.95	69.43	6,295.16	5,490.63	5,448.07	42.56	129.006	
9,800.00	8,901.71	8,868.56	8,867.10	24.14	18.45	-4.00	69.44	6,295.16	5,390.65	5,348.00	42.65	126.400	
9,900.00	8,903.21	8,869.80	8,868.34	24.26	18.45	-4.05	69.45	6,295.17	5,290.67	5,247.93	42.74	123.800	
10,000.00	8,904.72	8,871.06	8,869.59	24.50	18.45	-4.10	69.45	6,295.18	5,190.69	5,147.86	42.82	121.209	
10,100.00	8,906.22	8,872.33	8,870.87	24.88	18.45	-4.16	69.46	6,295.18	5,090.71	5,047.79	42.91	118.625	
10,200.00	8,907.72	8,873.62	8,872.16	25.32	18.46	-4.21	69.46	6,295.19	4,990.73	4,947.72	43.01	116.049	
10,300.00	8,909.22	8,874.94	8,873.47	25.80	18.46	-4.27	69.47	6,295.20	4,890.75	4,847.65	43.10	113.481	
10,400.00	8,910.72	8,876.27	8,874.80	26.33	18.46	-4.33	69.48	6,295.20	4,790.77	4,747.58	43.19	110.921	
10,500.00	8,912.22	8,877.62	8,876.15	26.89	18.46	-4.40	69.48	6,295.21	4,690.79	4,647.51	43.28	108.370	
10,600.00	8,913.72	8,878.99	8,877.52	27.49	18.47	-4.46	69.49	6,295.22	4,590.81	4,547.43	43.38	105.828	
10,700.00	8,915.22	8,880.38	8,878.91	28.12	18.47	-4.53	69.50	6,295.23	4,490.83	4,447.36	43.48	103.294	
10,800.00	8,916.72	8,881.79	8,880.33	28.77	18.47	-4.61	69.50	6,295.24	4,390.86	4,347.28	43.57	100.769	
10,900.00	8,918.22	8,883.22	8,881.76	29.46	18.48	-4.68	69.51	6,295.24	4,290.88	4,247.21	43.67	98.253	
11,000.00	8,919.72	8,900.00	8,898.54	30.17	18.51	-5.77	69.58	6,295.37	4,190.94	4,147.18	43.77	95.758	
11,100.00	8,921.23	8,900.00	8,898.54	30.91	18.51	-5.77	69.58	6,295.37	4,090.96	4,047.10	43.87	93.261	
11,200.00	8,922.73	8,900.00	8,898.54	31.67	18.51	-5.77	69.58	6,295.37	3,990.98	3,947.01	43.97	90.772	
11,300.00	8,924.23	8,900.00	8,898.54	32.45	18.51	-5.77	69.58	6,295.37	3,891.00	3,846.93	44.07	88.293	
11,400.00	8,925.73	8,900.00	8,898.54	33.25	18.51	-5.77	69.58	6,295.37	3,791.02	3,746.84	44.17	85.823	
11,500.00	8,927.23	8,900.00	8,898.54	34.06	18.51	-5.77	69.58	6,295.37	3,691.04	3,646.76	44.28	83.362	
11,600.00	8,928.73	8,900.00	8,898.54	34.90	18.51	-5.77	69.58	6,295.37	3,591.06	3,546.68	44.38	80.911	
11,700.00	8,930.23	8,900.00	8,898.54	35.75	18.51	-5.77	69.58	6,295.37	3,491.08	3,446.59	44.49	78.470	
11,800.00	8,931.73	8,900.00	8,898.54	36.61	18.51	-5.77	69.58	6,295.37	3,391.11	3,346.51	44.60	76.038	
11,900.00	8,933.23	8,900.00	8,898.54	37.49	18.51	-5.77	69.58	6,295.37	3,291.13	3,246.42	44.71	73.616	
11,937.88	8,933.80	8,900.00	8,898.54	37.82	18.51	-5.77	69.58	6,295.37	3,253.26	3,208.51	44.75	72.701	
12,000.00	8,934.73	8,900.90	8,899.43	38.38	18.51	20.19	69.59	6,295.38	3,191.16	3,146.34	44.82	71.205	
12,100.00	8,936.24	8,903.64	8,902.18	39.28	18.52	48.93	69.60	6,295.40	3,091.20	3,046.28	44.93	68.808	
12,200.00	8,937.74	8,906.37	8,904.90	40.19	18.52	63.01	69.61	6,295.42	2,991.29	2,946.26	45.03	66.422	
12,300.00	8,939.24	8,909.07	8,907.60	41.11	18.53	70.48	69.62	6,295.44	2,891.47	2,846.33	45.14	64.049	
12,400.00	8,940.74	8,911.75	8,910.28	42.03	18.54	74.97	69.63	6,295.46	2,791.78	2,746.52	45.26	61.687	
12,491.82	8,942.12	8,914.19	8,912.72	42.89	18.54	77.73	69.64	6,295.48	2,700.39	2,655.02	45.36	59.529	
12,500.00	8,942.24	8,914.41	8,912.94	42.96	18.54	77.78	69.64	6,295.48	2,692.26	2,646.88	45.37	59.337	
12,600.00	8,943.75	8,917.04	8,915.57	43.90	18.55	78.29	69.66	6,295.50	2,592.84	2,547.35	45.49	56.997	
12,700.00	8,945.25	8,919.64	8,918.18	44.84	18.55	78.80	69.67	6,295.52	2,493.47	2,447.86	45.61	54.665	
12,800.00	8,946.75	8,922.22	8,920.75	45.80	18.56	79.31	69.68	6,295.54	2,394.16	2,348.41	45.74	52.341	
12,900.00	8,948.25	8,924.77	8,923.30	46.76	18.56	79.82	69.69	6,295.56	2,294.89	2,249.02	45.87	50.026	
13,000.00	8,949.75	8,927.29	8,925.83	47.72	18.57	80.32	69.70	6,295.58	2,195.70	2,149.68	46.01	47.719	
13,100.00	8,951.25	8,929.79	8,928.32	48.70	18.57	80.82	69.71	6,295.59	2,096.57	2,050.41	46.16	45.419	
13,200.00	8,952.75	8,932.26	8,930.80	49.67	18.58	81.31	69.72	6,295.61	1,997.54	1,951.22	46.32	43.127	
13,300.00	8,954.25	8,934.71	8,933.24	50.66	18.58	81.80	69.74	6,295.63	1,898.59	1,852.11	46.49	40.842	
13,400.00	8,955.75	8,937.13	8,935.66	51.65	18.59	82.29	69.75	6,295.64	1,799.77	1,753.10	46.67	38.563	
13,500.00	8,957.25	8,939.53	8,938.06	52.64	18.59	82.77	69.76	6,295.66	1,701.07	1,654.20	46.87	36.291	
13,600.00	8,958.75	8,941.90	8,940.44	53.64	18.60	83.25	69.77	6,295.67	1,602.54	1,555.44	47.10	34.024	
13,700.00	8,960.26	8,944.25	8,942.79	54.64	18.60	83.72	69.78	6,295.69	1,504.20	1,456.84	47.36	31.762	
13,800.00	8,961.76	8,946.58	8,945.11	55.64	18.61	84.19	69.79	6,295.70	1,406.08	1,358.43	47.66	29.504	
13,900.00	8,963.26	8,948.88	8,947.42	56.65	18.61	84.66	69.81	6,295.72	1,308.25	1,260.24	48.01	27.250	

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

LEAM Drilling Systems LLC

Anticollision Report

Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Offset Design Parkway West (Offsets) - Unit 28 3 - OH - OH										Offset Site Error: 0.00 usft			
Survey Program: 100-MWD-ISCWSA										Offset Well Error: 0.00 usft			
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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	8,964.76	8,951.16	8,949.70	57.67	18.62	85.12	69.82	6,295.73	1,210.77	1,162.34	48.43	24.999	
14,100.00	8,966.26	8,953.42	8,951.95	58.69	18.62	85.58	69.83	6,295.74	1,113.73	1,064.77	48.96	22.750	
14,200.00	8,967.76	8,955.66	8,954.19	59.71	18.63	86.04	69.84	6,295.76	1,017.26	967.64	49.62	20.503	
14,211.82	8,967.94	8,955.92	8,954.45	59.83	18.63	86.09	69.84	6,295.76	1,005.90	956.20	49.70	20.238	
14,300.00	8,969.26	8,957.87	8,956.40	60.73	18.63	86.28	69.85	6,295.77	921.33	870.88	50.45	18.262	
14,400.00	8,970.77	8,960.06	8,958.59	61.76	18.64	86.54	69.86	6,295.78	825.81	774.32	51.50	16.036	
14,500.00	8,972.28	8,962.22	8,960.75	62.80	18.64	86.86	69.87	6,295.79	730.89	678.05	52.84	13.832	
14,600.00	8,973.79	8,964.35	8,962.88	63.84	18.65	87.22	69.89	6,295.80	636.85	582.24	54.61	11.661	
14,700.00	8,975.30	8,966.45	8,964.98	64.88	18.65	87.63	69.90	6,295.81	544.22	487.18	57.04	9.541	
14,765.09	8,976.29	8,967.80	8,966.34	65.56	18.65	87.93	69.90	6,295.82	485.06	425.93	59.13	8.203	
14,800.00	8,976.82	8,968.53	8,967.06	65.92	18.66	88.12	69.91	6,295.82	453.91	393.42	60.49	7.504	
14,900.00	8,978.33	8,970.58	8,969.11	66.97	18.66	88.68	69.92	6,295.83	368.42	302.74	65.69	5.609	
15,000.00	8,979.85	8,972.61	8,971.15	68.02	18.66	89.23	69.93	6,295.84	292.28	218.84	73.45	3.980	
15,100.00	8,981.36	8,974.63	8,973.16	69.08	18.67	89.77	69.94	6,295.85	234.76	151.55	83.21	2.821	
15,200.00	8,982.88	8,976.62	8,975.15	70.13	18.67	90.31	69.95	6,295.86	211.63	122.85	88.78	2.384	
15,201.64	8,982.90	8,976.65	8,975.19	70.15	18.67	90.32	69.95	6,295.86	211.63	122.84	88.78	2.384	CC, ES, SF
15,300.00	8,984.39	8,978.59	8,977.13	71.19	18.68	90.85	69.96	6,295.87	233.36	149.86	83.50	2.795	
15,400.00	8,985.91	8,980.55	8,979.08	72.25	18.68	91.38	69.98	6,295.88	290.03	216.20	73.82	3.929	
15,500.00	8,987.42	8,982.49	8,981.02	73.31	18.68	91.90	69.99	6,295.89	365.74	299.58	66.16	5.528	
15,600.00	8,988.94	8,984.40	8,982.94	74.37	18.69	92.42	70.00	6,295.90	451.01	389.88	61.13	7.377	
15,700.00	8,990.45	8,986.30	8,984.84	75.44	18.69	92.93	70.01	6,295.91	541.34	483.41	57.93	9.345	
15,800.00	8,991.97	8,988.19	8,986.72	76.50	18.70	93.44	70.02	6,295.91	634.57	578.72	55.85	11.361	
15,900.00	8,993.48	8,990.05	8,988.58	77.57	18.70	93.94	70.03	6,295.92	729.59	675.11	54.48	13.392	
16,000.00	8,995.00	8,991.90	8,990.43	78.64	18.70	94.44	70.04	6,295.93	825.79	772.23	53.55	15.420	
16,100.00	8,996.51	8,993.73	8,992.26	79.71	18.71	94.93	70.05	6,295.93	922.78	869.87	52.92	17.438	
16,200.00	8,998.03	8,995.54	8,994.07	80.78	18.71	95.42	70.06	6,295.94	1,020.36	967.88	52.48	19.443	
16,300.00	8,999.54	8,997.34	8,995.87	81.85	18.72	95.90	70.07	6,295.95	1,118.36	1,066.18	52.18	21.434	
16,400.00	9,001.06	9,000.00	8,998.53	82.93	18.72	96.62	70.09	6,295.96	1,216.68	1,164.71	51.98	23.408	
16,500.00	9,002.57	9,000.95	8,999.49	84.00	18.72	96.87	70.09	6,295.96	1,315.26	1,263.42	51.84	25.371	
16,528.18	9,003.00	9,001.49	9,000.02	84.30	18.72	97.01	70.10	6,295.96	1,343.07	1,291.26	51.81	25.921	

LEAM Drilling Systems LLC

Anticollision Report

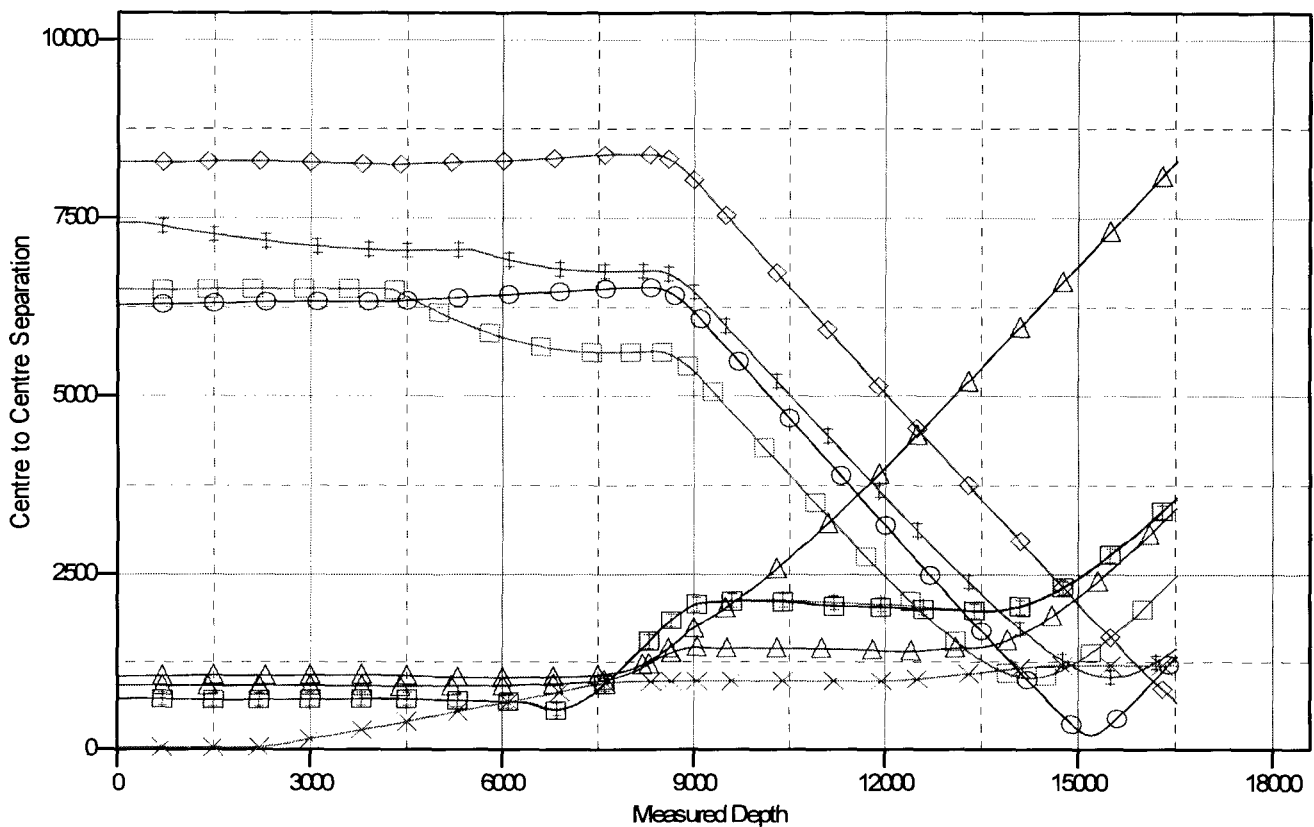
Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3307.4' GE + 23.5' KB @ 3330.90usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 62H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.12°

Ladder Plot



LEGEND

- OnyxPWU 29#4H, OH, OHV0
- 7H, OH, Plan #1 - Draft#4 V0
- 7H, OH, OH (Actual) V0
- 2H, OH, OHV0
- 1H, OH, OHV0
- 16, OH, OHV0
- Unit283, OH, OHV0
- 12H, OH, Plan #2 V0
- Mirage 30 PM State Corn 1H (Offset), OH, OHV0

LEAM Drilling Systems LLC

Anticollision Report

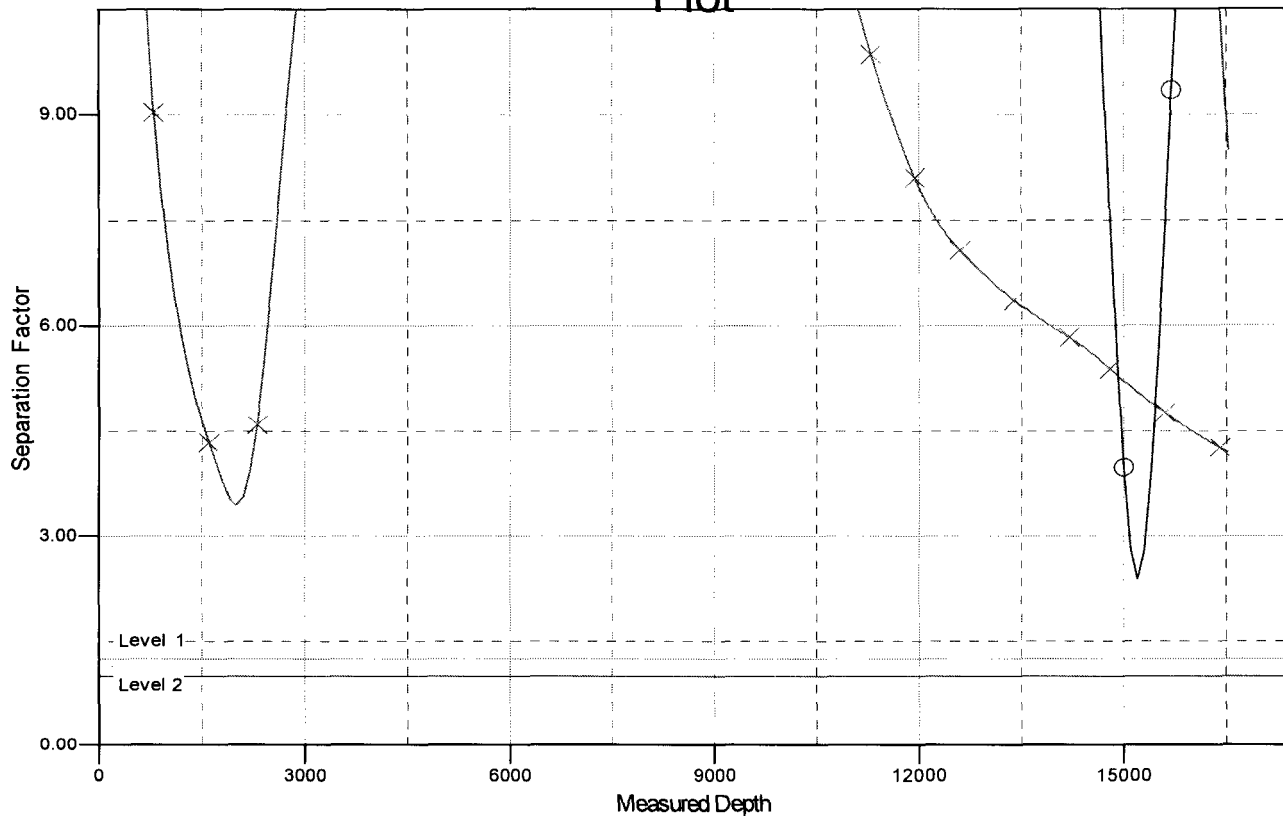
Company: Devon Energy
Project: Eddy County, NM (NAD-83)
Reference Site: Onyx PWU 29-28
Site Error: 0.00 usft
Reference Well: 62H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #2

Local Co-ordinate Reference: Well 62H
TVD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
MD Reference: 3307.4' GE + 23.5' KB @ 3330.90usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Multi User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3307.4' GE + 23.5' KB @ 3330.90usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 62H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.12°

Separation Factor Plot



LEGEND

- | | | |
|------------------------------|---------------|---|
| OnyxPWU29#4H, OH, OH V0 | 2H, OH, OH V0 | Unit283, OH, OH V0 |
| 7H, OH, Plan #1 - Draft#4 V0 | 1H, OH, OH V0 | 12H, OH, Plan#2 V0 |
| 7H, OH, OH (Actual) V0 | 16, OH, OH V0 | Mirage 30 PM State Com 1H (Offset), OH, OH V0 |