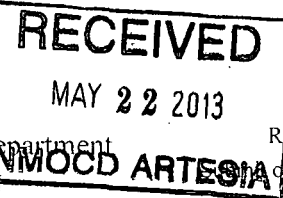


District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis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

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



Form C-102
Revised August 1, 2011
One copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-41380	² Pool Code 55510	³ Pool Name Darkway Scanlon Draw; Bone Spring
⁴ Property Code 38568	⁵ Property Name ONYX PWU "29"	⁶ Well Number 7H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3304.0

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	19 S	29 E		1800	SOUTH	175	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

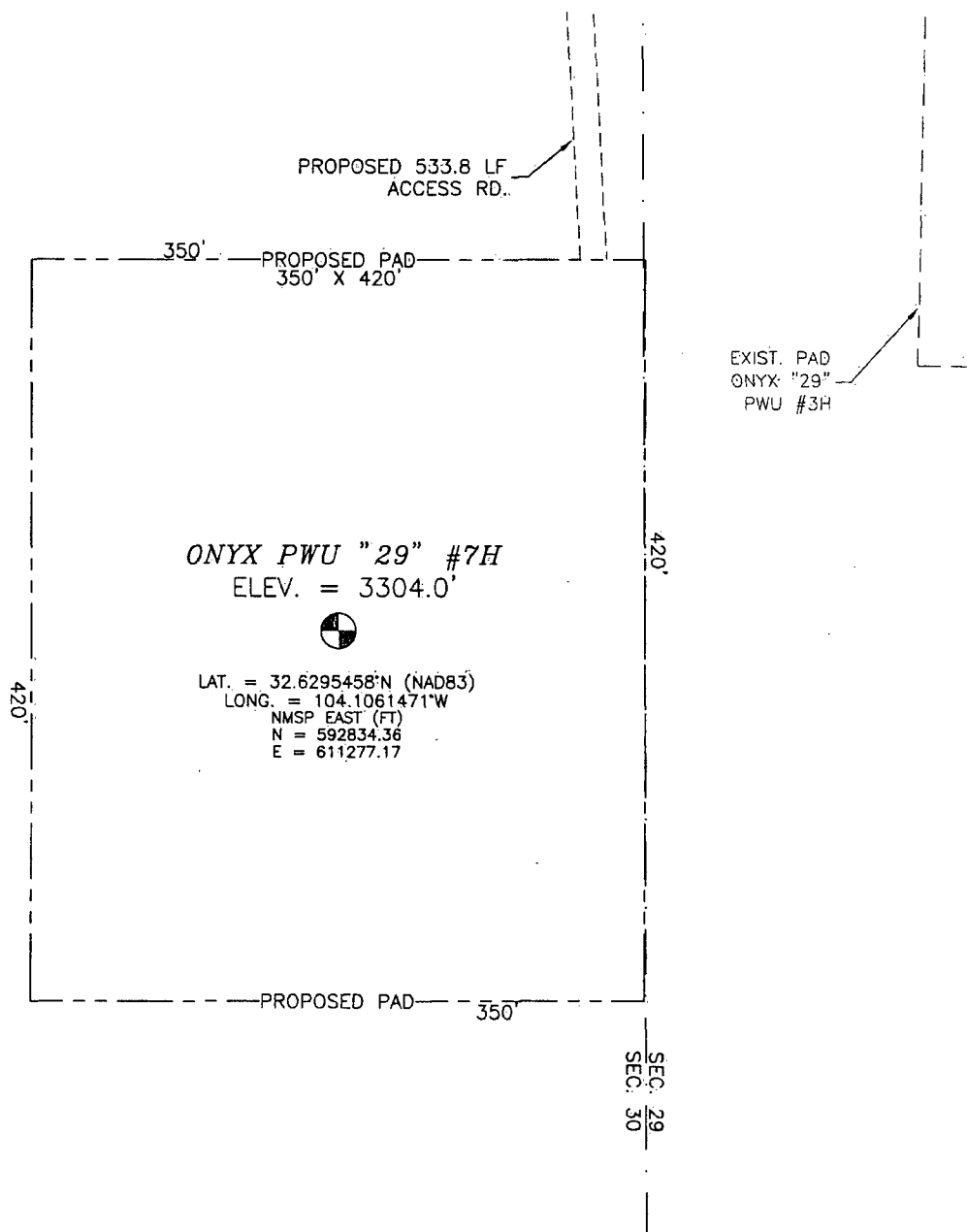
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	29	19 S	29 E		1980	SOUTH	330	EAST	EDDY

¹² Dedicated Acres 160 ac	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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

2394.17 FT N89°38'49"W 2641.20 FT N89°49'44"W 2653.42 FT N89°57'46"W 2643.26 FT N O CORNER SEC. 30 LAT. = 32.6391888°N LONG. = 104.1141797°W NMSP EAST (FT) N = 596337.34 E = 608797.08 NE CORNER SEC. 30 LAT. = 32.6391287°N LONG. = 104.1055996°W NMSP EAST (FT) N = 596321.06 E = 611438.23 N O CORNER SEC. 29 LAT. = 32.6390910°N LONG. = 104.0989797°W NMSP EAST (FT) N = 596313.14 E = 614091.64 NE CORNER SEC. 29 LAT. = 32.6390699°N LONG. = 104.0883927°W NMSP EAST (FT) N = 596311.43 E = 616734.90 ONYX PWU "29" 7H ELEV. = 3304.0' LAT. = 32.6295458°N (NAD83) LONG. = 104.1061471°W NMSP EAST (FT) N = 592834.36 E = 611277.17 SEC 30 SURFACE LOCATION 175' SE CORNER SEC. 30 LAT. = 32.6245985°N LONG. = 104.1055679°W NMSP EAST (FT) N = 591034.18 E = 611459.34 SE CORNER SEC. 29 LAT. = 32.6245766°N LONG. = 104.0989987°W NMSP EAST (FT) N = 591032.71 E = 614097.52 SE CORNER SEC. 29 LAT. = 32.6245465°N LONG. = 104.0884181°W NMSP EAST (FT) N = 591027.73 E = 616739.26 SEC 29 BOTTOM OF HOLE LAT. = 32.6299928°N LONG. = 104.0894754°W NMSP EAST (FT) N = 593008.36 E = 616409.21 BOTTOM OF HOLE 330' 2515.95 FT S89°48'07"E 2515.95 FT S89°58'05"E 2638.18 FT S89°53'32"E 2641.74 FT		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or leased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>[Signature]</i> 5/20/13 Signature Date Ryan DeLong Printed Name Ryan.Delong@dvn.com E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JULY 31, 2012 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number: 1116201 J. J. ARANILLO, PLS 12797 SURVEY NO. 951A
--	--	--

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



ONYX PWU "29" #7H
ELEV. = 3304.0'

LAT. = 32.6295458°N (NAD83)
LONG. = 104.1061471°W
NMSP EAST (FT)
N = 592834.36
E = 611277.17



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 210 (OLD LOCO) AND CR 235 (CURRY COMB) GO NORTHWEST ON CR 235 FOR APPROX. 1.4 MILES. GO SOUTH (YELLOW CATTLE GUARD) FOR APPROX. 1.8 MILES TO ONYX #3H WELL. LOCATION IS APPROX. 250 FT WEST.

DEVON ENERGY PRODUCTION COMPANY, L.P.

ONYX PWU "29" #7H

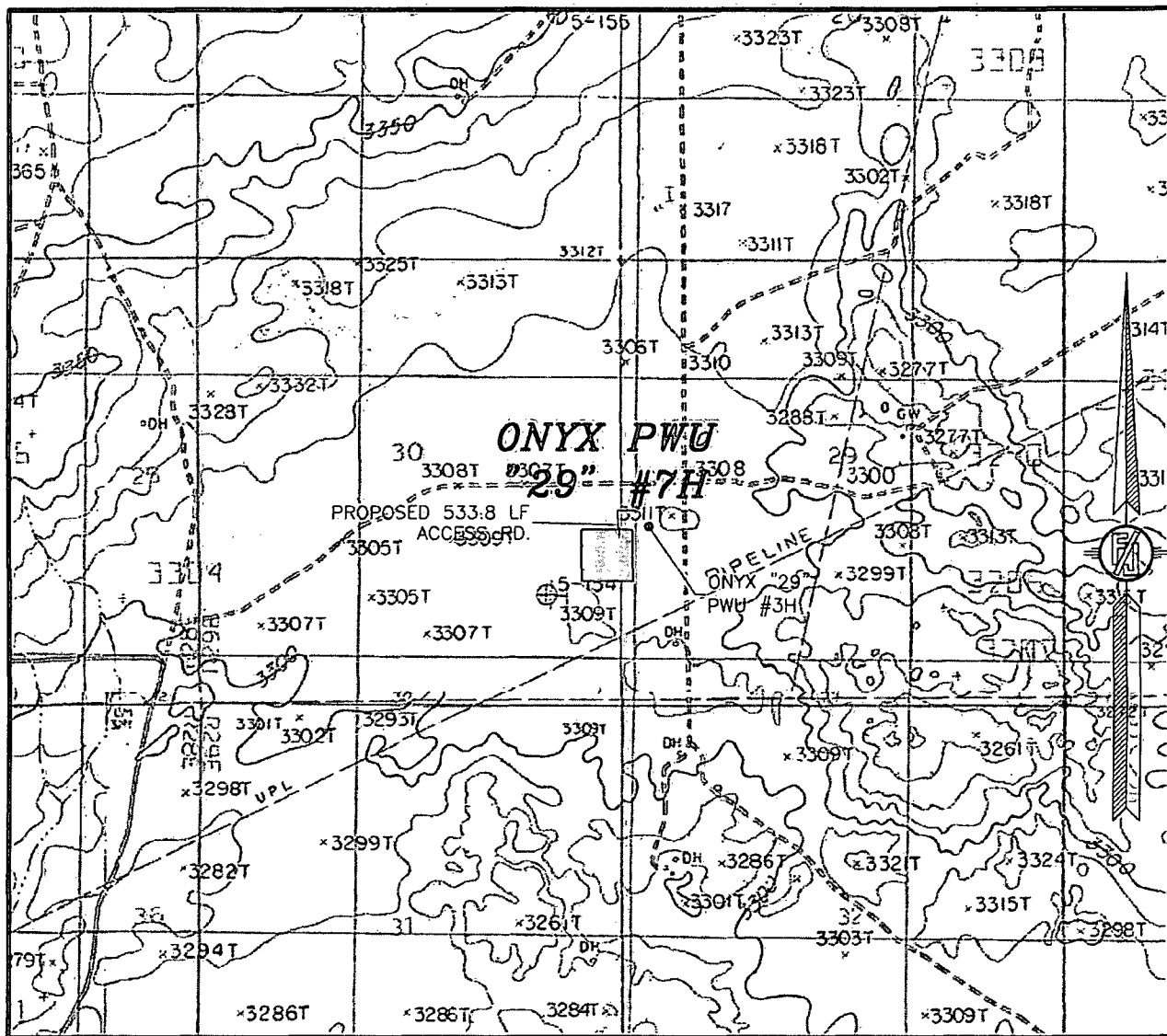
LOCATED 1800 FT. FROM THE SOUTH LINE
AND 175 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 31, 2012

SURVEY NO. 951A

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

SECTION 30, 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" #7H

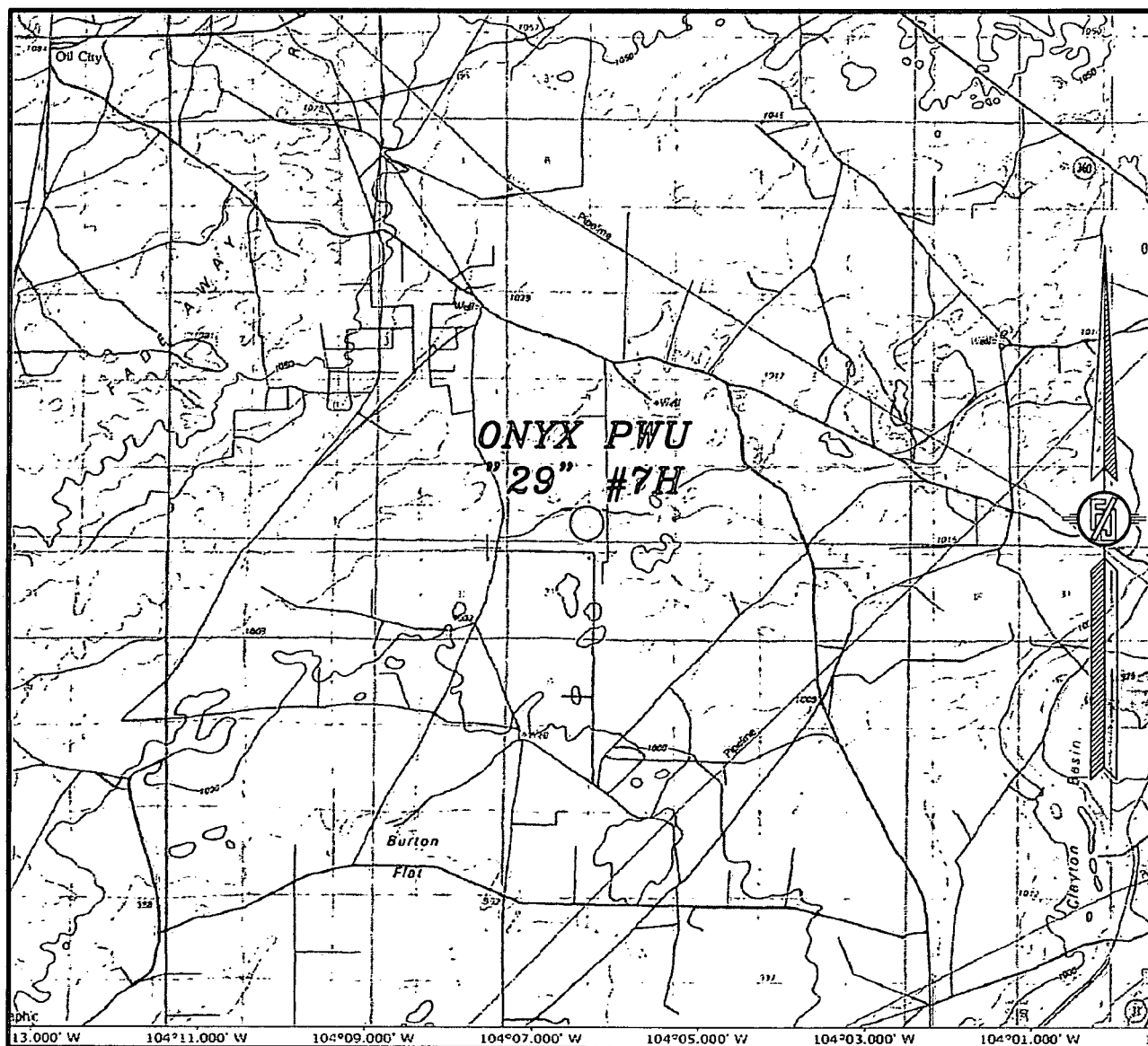
LOCATED 1800 FT. FROM THE SOUTH LINE
AND 175 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 31, 2012

SURVEY NO. 951A

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

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

ONYX PWU "29" #7H

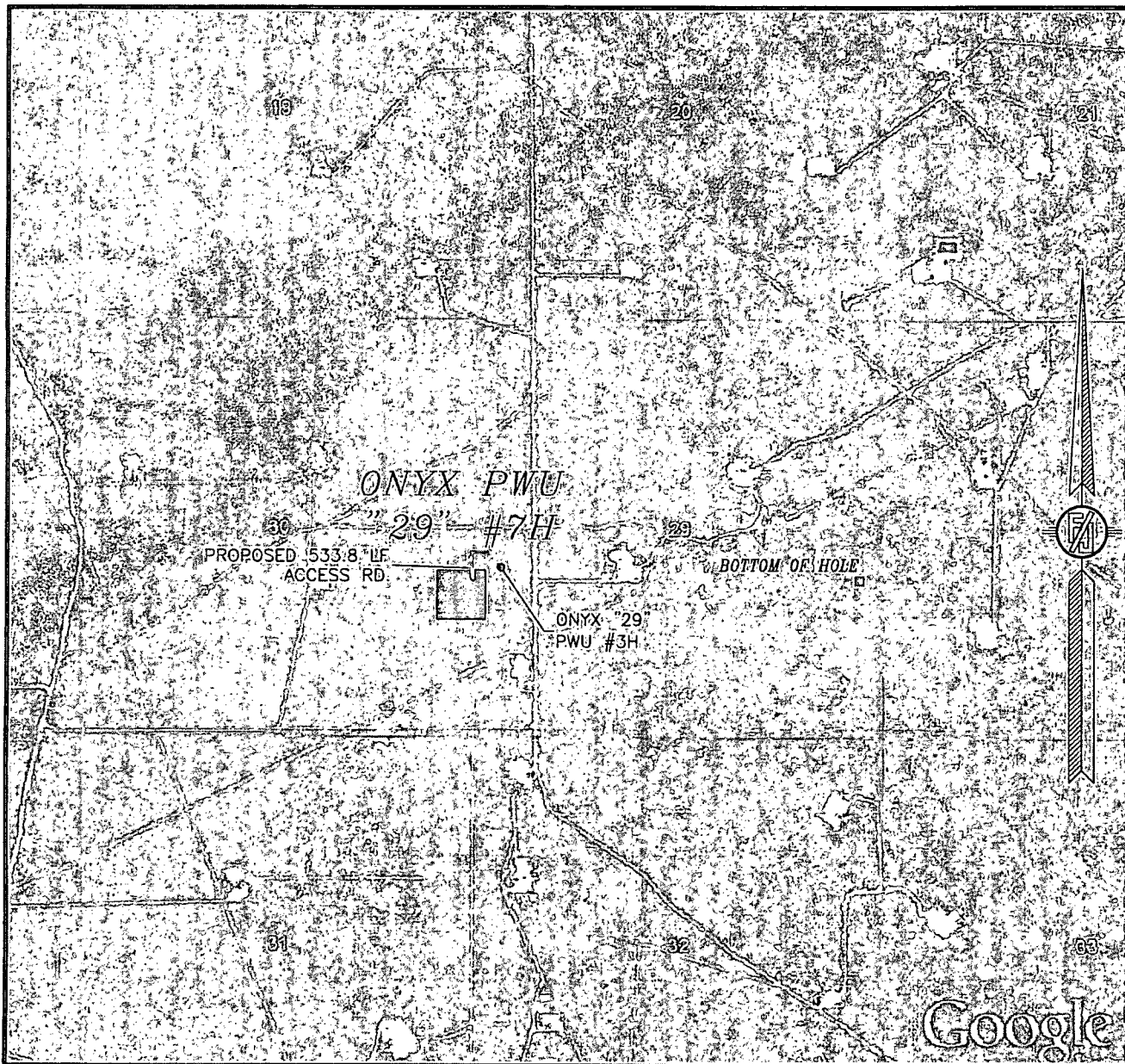
LOCATED 1800 FT. FROM THE SOUTH LINE
AND 175 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 31, 2012

SURVEY NO. 951A

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

SECTION 30, 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
JUNE 2011

DEVON ENERGY PRODUCTION COMPANY, L.P.

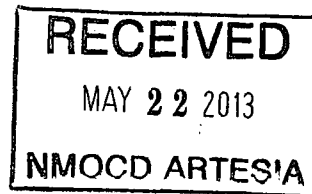
ON YX PWU "29" #7H

LOCATED 1800 FT. FROM THE SOUTH LINE
AND 175 FT. FROM THE EAST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 31, 2012

SURVEY NO. 951A

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



Weatherford®

Drilling Services

Proposal



devon

ONYX PWU 29 7H

EDDY COUNTY, NM

WELL FILE: **PLAN 2**

MARCH 4, 2013

Weatherford International, Ltd.

P.O. Box 61028
Midland, TX 79711 USA
+1.432.561.8892 Main
+1.432.561.8895 Fax
www.weatherford.com



Onyx PWU 29 7H
Eddy Co, NM

SECTION DETAILS

Ser	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	88.06	0.00	0.00	0.00	0.00	0.00	0.00	
2	6409.71	0.00	88.06	6409.71	0.00	0.00	0.00	0.00	0.00	
3	7146.63	88.43	88.06	6887.00	15.74	464.12	12.00	88.06	464.38	
4	11818.99	88.43	88.06	7015.00	174.00	5132.04	0.00	0.00	5134.99	PBHL

SITE DETAILS

Onyx PWU 29 7H

Site Centre Northing: 592834.36
Easting: 611277.17

Ground Level: 3304.00
Positional Uncertainty: 0.00
Convergence: 0.12

WELL DETAILS

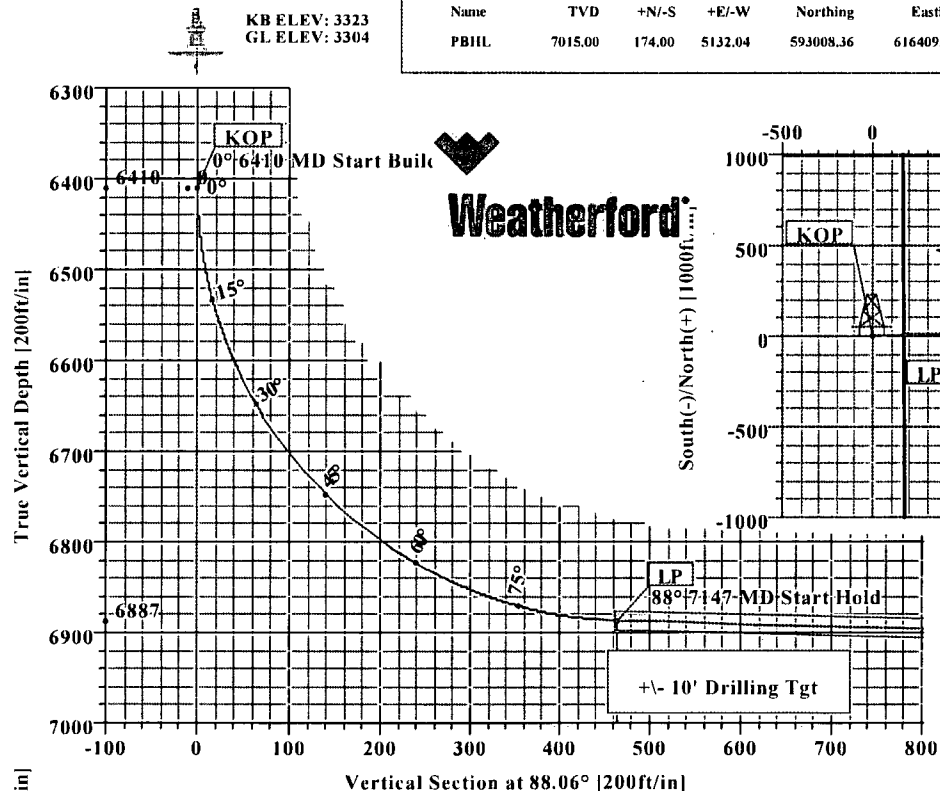
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Onyx PWU 29 7H	0.00	0.00	592834.36	611277.17	32°37'46.353N	104°06'22.144W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7015.00	174.00	5132.04	593008.36	616409.21	32°37'47.962N	104°05'22.126W	Point

LEGEND

- Exist. PWU 28#3 (1)
- 29 #3H (1)
- 1
- Plan #2





Weatherford

Wft Plan Report X Y's.



Company: Devon Energy Date: 3/4/2013 Time: 14:03:48 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: Onyx PWU 29 7H, Grid North
Site: Onyx PWU 29 7H Vertical (TVD) Reference: SITE 3323.0
Well: Onyx PWU 29 7H Section (VS) Reference: Well (0.00N,0.00E,88.06Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #2 Date Composed: 3/4/2013
Principal: Yes Version: 1
Tied-to: From Surface

Site: Onyx PWU 29 7H

Site Position: Northing: 592834.36 ft Latitude: 32 37 46.353 N
From: Map Easting: 611277.17 ft Longitude: 104 6 22.144 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3304.00 ft Grid Convergence: 0.12 deg

Well: Onyx PWU 29 7H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 592834.36 ft Latitude: 32 37 46.353 N
+E/-W 0.00 ft Easting: 611277.17 ft Longitude: 104 6 22.144 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height 3323.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 3/15/2013 Above System Datum: Mean Sea Level
Field Strength: 48652 nT Declination: 7.65 deg
Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.43 deg
ft +E/-W Direction
deg
0.00 0.00 0.00 88.06

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	88.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6409.71	0.00	88.06	6409.71	0.00	0.00	0.00	0.00	0.00	0.00	
7146.63	88.43	88.06	6887.00	15.74	464.12	12.00	12.00	0.00	88.06	
11818.99	88.43	88.06	7015.00	174.00	5132.04	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
6409.71	0.00	88.06	6409.71	0.00	0.00	0.00	0.00	592834.36	611277.17	KOP
6425.00	1.83	88.06	6425.00	0.01	0.24	0.24	12.00	592834.37	611277.41	
6450.00	4.83	88.06	6449.95	0.06	1.70	1.70	12.00	592834.42	611278.87	
6475.00	7.83	88.06	6474.80	0.15	4.45	4.46	12.00	592834.51	611281.62	
6500.00	10.83	88.06	6499.46	0.29	8.51	8.51	12.00	592834.65	611285.68	
6525.00	13.83	88.06	6523.88	0.47	13.84	13.85	12.00	592834.83	611291.01	
6550.00	16.83	88.06	6547.99	0.69	20.45	20.46	12.00	592835.05	611297.62	
6575.00	19.83	88.06	6571.72	0.96	28.31	28.33	12.00	592835.32	611305.48	
6600.00	22.83	88.06	6595.00	1.27	37.40	37.42	12.00	592835.63	611314.57	
6625.00	25.83	88.06	6617.78	1.62	47.69	47.72	12.00	592835.98	611324.86	
6650.00	28.83	88.06	6639.98	2.01	59.16	59.20	12.00	592836.37	611336.33	
6675.00	31.83	88.06	6661.56	2.43	71.78	71.82	12.00	592836.79	611348.95	
6700.00	34.83	88.06	6682.44	2.90	85.51	85.56	12.00	592837.26	611362.68	
6725.00	37.83	88.06	6702.58	3.40	100.31	100.37	12.00	592837.76	611377.48	
6750.00	40.83	88.06	6721.91	3.94	116.15	116.22	12.00	592838.30	611393.32	
6775.00	43.83	88.06	6740.39	4.51	132.97	133.05	12.00	592838.87	611410.14	
6800.00	46.83	88.06	6757.97	5.11	150.74	150.83	12.00	592839.47	611427.91	
6825.00	49.83	88.06	6774.58	5.74	169.41	169.50	12.00	592840.10	611446.58	
6850.00	52.83	88.06	6790.20	6.41	188.91	189.02	12.00	592840.77	611466.08	
6875.00	55.83	88.06	6804.77	7.09	209.21	209.33	12.00	592841.45	611486.38	
6900.00	58.83	88.06	6818.27	7.81	230.24	230.37	12.00	592842.17	611507.41	
6925.00	61.83	88.06	6830.64	8.54	251.95	252.09	12.00	592842.90	611529.12	
6950.00	64.83	88.06	6841.86	9.30	274.28	274.43	12.00	592843.66	611551.45	



Weatherford

Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy

Date: 3/4/2013

Time: 14:03:48

Page: 2

Field: Eddy Co., NM (NAD 83)

Co-ordinate(NE) Reference: Well: Onyx PWU 29 7H, Grid North

Site: Onyx PWU 29 7H

Vertical (TVD) Reference: SITE 3323.0

Well: Onyx PWU 29 7H

Section (VS) Reference: Well (0.00N,0.00E,88.06Azi)

Wellpath: 1

Survey Calculation Method: Minimum Curvature

Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
6975.00	67.83	88.06	6851.89	10.08	297.16	297.33	12.00	592844.44	611574.33	
7000.00	70.83	88.06	6860.71	10.87	320.53	320.72	12.00	592845.23	611597.70	
7025.00	73.83	88.06	6868.30	11.67	344.34	344.53	12.00	592846.03	611621.51	
7050.00	76.83	88.06	6874.63	12.49	368.51	368.72	12.00	592846.85	611645.68	
7075.00	79.83	88.06	6879.68	13.32	392.97	393.20	12.00	592847.68	611670.14	
7100.00	82.83	88.06	6883.45	14.16	417.67	417.91	12.00	592848.52	611694.84	
7125.00	85.83	88.06	6885.91	15.00	442.53	442.79	12.00	592849.36	611719.70	
7146.63	88.43	88.06	6887.00	15.74	464.12	464.38	12.00	592850.10	611741.29	LP
7200.00	88.43	88.06	6888.46	17.54	517.44	517.74	0.00	592851.90	611794.61	
7300.00	88.43	88.06	6891.20	20.93	617.34	617.70	0.00	592855.29	611894.51	
7400.00	88.43	88.06	6893.94	24.32	717.25	717.66	0.00	592858.68	611994.42	
7500.00	88.43	88.06	6896.68	27.71	817.15	817.62	0.00	592862.07	612094.32	
7600.00	88.43	88.06	6899.42	31.09	917.06	917.59	0.00	592865.45	612194.23	
7700.00	88.43	88.06	6902.16	34.48	1016.96	1017.55	0.00	592868.84	612294.13	
7800.00	88.43	88.06	6904.90	37.87	1116.87	1117.51	0.00	592872.23	612394.04	
7900.00	88.43	88.06	6907.64	41.25	1216.77	1217.47	0.00	592875.61	612493.94	
8000.00	88.43	88.06	6910.37	44.64	1316.68	1317.44	0.00	592879.00	612593.85	
8100.00	88.43	88.06	6913.11	48.03	1416.58	1417.40	0.00	592882.39	612693.75	
8200.00	88.43	88.06	6915.85	51.42	1516.49	1517.36	0.00	592885.78	612793.66	
8300.00	88.43	88.06	6918.59	54.80	1616.39	1617.32	0.00	592889.16	612893.56	
8400.00	88.43	88.06	6921.33	58.19	1716.30	1717.29	0.00	592892.55	612993.47	
8500.00	88.43	88.06	6924.07	61.58	1816.20	1817.25	0.00	592895.94	613093.37	
8600.00	88.43	88.06	6926.81	64.97	1916.11	1917.21	0.00	592899.33	613193.28	
8700.00	88.43	88.06	6929.55	68.35	2016.02	2017.17	0.00	592902.71	613293.19	
8800.00	88.43	88.06	6932.29	71.74	2115.92	2117.14	0.00	592906.10	613393.09	
8900.00	88.43	88.06	6935.03	75.13	2215.83	2217.10	0.00	592909.49	613493.00	
9000.00	88.43	88.06	6937.77	78.51	2315.73	2317.06	0.00	592912.87	613592.90	
9100.00	88.43	88.06	6940.51	81.90	2415.64	2417.02	0.00	592916.26	613692.81	
9200.00	88.43	88.06	6943.25	85.29	2515.54	2516.99	0.00	592919.65	613792.71	
9300.00	88.43	88.06	6945.99	88.68	2615.45	2616.95	0.00	592923.04	613892.62	
9400.00	88.43	88.06	6948.73	92.06	2715.35	2716.91	0.00	592926.42	613992.52	
9500.00	88.43	88.06	6951.47	95.45	2815.26	2816.87	0.00	592929.81	614092.43	
9600.00	88.43	88.06	6954.21	98.84	2915.16	2916.84	0.00	592933.20	614192.33	
9700.00	88.43	88.06	6956.95	102.22	3015.07	3016.80	0.00	592936.58	614292.24	
9800.00	88.43	88.06	6959.69	105.61	3114.97	3116.76	0.00	592939.97	614392.14	
9900.00	88.43	88.06	6962.43	109.00	3214.88	3216.72	0.00	592943.36	614492.05	
10000.00	88.43	88.06	6965.17	112.39	3314.78	3316.69	0.00	592946.75	614591.95	
10100.00	88.43	88.06	6967.91	115.77	3414.69	3416.65	0.00	592950.13	614691.86	
10200.00	88.43	88.06	6970.65	119.16	3514.59	3516.61	0.00	592953.52	614791.76	
10300.00	88.43	88.06	6973.39	122.55	3614.50	3616.57	0.00	592956.91	614891.67	
10400.00	88.43	88.06	6976.13	125.94	3714.40	3716.54	0.00	592960.30	614991.57	
10500.00	88.43	88.06	6978.86	129.32	3814.31	3816.50	0.00	592963.68	615091.48	
10600.00	88.43	88.06	6981.60	132.71	3914.21	3916.46	0.00	592967.07	615191.38	
10700.00	88.43	88.06	6984.34	136.10	4014.12	4016.42	0.00	592970.46	615291.29	
10800.00	88.43	88.06	6987.08	139.48	4114.02	4116.39	0.00	592973.84	615391.19	
10900.00	88.43	88.06	6989.82	142.87	4213.93	4216.35	0.00	592977.23	615491.10	
11000.00	88.43	88.06	6992.56	146.26	4313.83	4316.31	0.00	592980.62	615591.00	
11100.00	88.43	88.06	6995.30	149.65	4413.74	4416.27	0.00	592984.01	615690.91	
11200.00	88.43	88.06	6998.04	153.03	4513.64	4516.24	0.00	592987.39	615790.81	
11300.00	88.43	88.06	7000.78	156.42	4613.55	4616.20	0.00	592990.78	615890.72	
11400.00	88.43	88.06	7003.52	159.81	4713.45	4716.16	0.00	592994.17	615990.62	
11500.00	88.43	88.06	7006.26	163.20	4813.36	4816.12	0.00	592997.56	616090.53	



Weatherford

Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Onyx PWU 29 7H
Well: Onyx PWU 29 7H
Wellpath: 1

Date: 3/4/2013 Time: 14:03:48 Page: 3
Co-ordinate(NE) Reference: Well: Onyx PWU 29 7H, Grid North
Vertical (TVD) Reference: SITE 3323.0
Section (VS) Reference: Well (0.00N,0.00E,88.06Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
11600.00	88.43	88.06	7009.00	166.58	4913.26	4916.08	0.00	593000.94	616190.43	
11700.00	88.43	88.06	7011.74	169.97	5013.17	5016.05	0.00	593004.33	616290.34	
11800.00	88.43	88.06	7014.48	173.36	5113.07	5116.01	0.00	593007.72	616390.24	
11818.99	88.43	88.06	7015.00	174.00	5132.04	5134.99	0.00	593008.36	616409.21	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec	<--- Longitude ---> Deg Min Sec
PBHL			7015.00	174.00	5132.04	593008.36	616409.21	32 37 47.962 N	104 5 22.126 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6409.71	6409.71	KOP
7146.63	6887.00	LP
11818.99	0.00	PBHL



Weatherford Anticollision Report



Company: Devon Energy Date: 3/4/2013 Time: 14:04:47 Page: 1
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H Co-ordinate(N/E) Reference: Well: Onyx PWU 29 7H, Grid North
Reference Well: Onyx PWU 29 7H Vertical (TVD) Reference: SITE 3323.0
Reference Wellpath: Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria Reference: Plan: Plan #2
Interpolation Method MD + Stations Interval: 100.00 ft Error Model: ISWWSA Ellipse
Depth Range: 0.00 to 12295.77 ft Scan Method: Closest Approach 3D
Maximum Radius 40000.00 ft Error Surface: Ellipse

Plan: Plan #2 Date Composed: 3/4/2013
Principal: Yes Version: 1
Tied-to: From Surface

Summary

Site	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Edge Distance ft	Separation Distance ft	Factor	Warning
Exist. PWU 28#3	Exist. PWU 28#3	1 V0	8800.00	6917.59	191.89	118.68	2.62	
Onyx PWU 29 #3H	29 #3H	1 V0	11818.99	12302.98	925.77	838.09	10.56	

Site: Exist. PWU 28#3
Well: Exist. PWU 28#3
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset MD ft	TVD ft	Semi-Major Axis Ref ft	Offset ft	TFO-HS deg	Offset Location North ft	East ft	Ctr-Ctr Edge Distance ft	Separation Distance ft	Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	85.26	178.72	2154.28	2161.76			No Data
100.00	100.00	82.18	82.18	0.09	0.11	85.25	178.95	2154.26	2161.68	2161.48	10798.52	
200.00	200.00	176.85	176.85	0.32	0.33	85.24	179.53	2154.30	2161.77	2161.12	3346.49	
300.00	300.00	275.54	275.53	0.54	0.58	85.22	179.98	2154.55	2162.07	2160.95	1926.91	
400.00	400.00	371.54	371.53	0.77	0.82	85.22	180.28	2154.88	2162.43	2160.85	1366.71	
500.00	500.00	469.61	469.60	0.99	1.06	85.21	180.54	2155.40	2162.99	2160.94	1057.05	
600.00	600.00	570.80	570.80	1.21	1.31	85.20	180.93	2155.94	2163.54	2161.02	855.39	
700.00	700.00	664.43	664.42	1.44	1.56	85.19	181.52	2156.46	2164.16	2161.15	721.26	
800.00	800.00	754.46	754.44	1.66	1.80	85.17	182.29	2157.33	2165.20	2161.73	625.63	
900.00	900.00	847.95	847.92	1.89	2.04	85.15	183.02	2158.65	2166.66	2162.73	551.85	
1000.00	1000.00	945.30	945.26	2.11	2.29	85.14	183.74	2160.18	2168.30	2163.90	492.79	
1100.00	1100.00	1046.82	1046.76	2.34	2.55	85.12	184.57	2161.86	2170.01	2165.12	444.03	
1200.00	1200.00	1154.77	1154.69	2.56	2.83	85.10	185.51	2163.35	2171.46	2166.07	402.47	
1300.00	1300.00	1261.19	1261.10	2.79	3.11	85.08	186.43	2164.43	2172.55	2166.64	368.14	
1400.00	1400.00	1368.05	1367.96	3.01	3.39	85.05	187.50	2165.22	2173.37	2166.97	339.40	
1500.00	1500.00	1475.44	1475.33	3.24	3.66	85.02	188.78	2165.62	2173.84	2166.95	315.38	
1600.00	1600.00	1583.62	1583.51	3.46	3.90	84.99	190.03	2165.64	2173.97	2166.61	295.34	
1700.00	1700.00	1690.50	1690.38	3.69	4.11	84.95	191.18	2165.29	2173.73	2165.93	278.67	
1800.00	1800.00	1795.70	1795.57	3.91	4.31	84.92	192.33	2164.65	2173.22	2165.01	264.49	
1900.00	1900.00	1899.04	1898.90	4.14	4.49	84.89	193.54	2163.82	2172.52	2163.90	251.86	
2000.00	2000.00	1995.78	1995.63	4.36	4.67	84.86	194.67	2163.03	2171.82	2162.79	240.48	
2100.00	2100.00	2096.45	2096.29	4.59	4.86	84.83	195.62	2162.30	2171.18	2161.73	229.89	
2200.00	2200.00	2196.55	2196.39	4.81	5.04	84.81	196.43	2161.56	2170.52	2160.66	220.26	
2300.00	2300.00	2297.75	2297.59	5.04	5.23	84.79	197.21	2160.79	2169.83	2159.56	211.30	
2400.00	2400.00	2400.29	2400.12	5.26	5.42	84.76	197.99	2159.92	2169.05	2158.37	203.00	
2500.00	2500.00	2492.77	2492.60	5.49	5.61	84.74	198.73	2159.24	2168.39	2157.29	195.36	
2600.00	2600.00	2599.49	2599.31	5.71	5.83	84.72	199.48	2158.50	2167.77	2156.23	187.88	
2700.00	2700.00	2704.61	2704.42	5.93	6.01	84.70	199.97	2157.48	2166.85	2154.90	181.43	
2800.00	2800.00	2802.71	2802.51	6.16	6.18	84.69	200.43	2156.47	2165.86	2153.52	175.52	
2900.00	2900.00	2906.84	2906.64	6.38	6.35	84.68	200.78	2155.33	2164.80	2152.07	169.94	
3000.00	3000.00	3003.45	3003.24	6.61	6.51	84.67	200.99	2154.29	2163.75	2150.63	164.92	
3100.00	3100.00	3108.36	3108.15	6.83	6.70	84.66	201.37	2153.09	2162.64	2149.11	159.82	
3200.00	3200.00	3206.86	3206.64	7.06	6.87	84.65	201.62	2151.90	2161.46	2147.54	155.17	
3300.00	3300.00	3303.14	3302.91	7.28	7.05	84.64	201.94	2150.85	2160.41	2146.08	150.71	
3400.00	3400.00	3403.74	3403.50	7.51	7.27	84.62	202.59	2149.79	2159.42	2144.64	146.10	
3500.00	3500.00	3490.61	3490.37	7.73	7.48	84.60	203.33	2149.11	2158.73	2143.51	141.88	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H
Reference Well: Onyx PWU 29 7H
Reference Wellpath:

Date: 3/4/2013

Time: 14:04:47

Page: 2

Co-ordinate(N/E) Reference: Well: Onyx PWU 29 7H; Grid North
Vertical (TVD) Reference: SITE 3323.0

Db: Sybase

Site: Exist. PWU 28#3
Well: Exist. PWU 28#3
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3600.00	3600.00	3578.80	3578.55	7.96	7.71	84.56	204.48	2148.91	2158.62	2142.95	137.81	
3700.00	3700.00	3680.59	3680.32	8.18	7.97	84.51	206.38	2148.92	2158.81	2142.66	133.66	
3800.00	3800.00	3800.82	3800.52	8.41	8.28	84.44	209.13	2148.24	2158.48	2141.79	129.35	
3900.00	3900.00	3911.07	3910.72	8.63	8.56	84.36	211.99	2146.81	2157.44	2140.25	125.48	
4000.00	4000.00	4040.75	4040.31	8.86	8.88	84.27	215.22	2143.65	2155.22	2137.48	121.53	
4100.00	4100.00	4150.05	4149.49	9.08	9.15	84.15	219.17	2140.09	2152.34	2134.11	118.10	
4200.00	4200.00	4253.13	4252.43	9.31	9.40	84.04	223.00	2136.26	2149.02	2130.32	114.90	
4300.00	4300.00	4352.45	4351.59	9.53	9.65	83.92	227.13	2132.63	2145.82	2126.64	111.90	
4400.00	4400.00	4458.01	4456.98	9.76	9.91	83.79	231.60	2128.59	2142.46	2122.80	108.95	
4500.00	4500.00	4553.52	4552.36	9.98	10.15	83.69	234.83	2124.87	2138.96	2118.84	106.29	
4600.00	4600.00	4651.38	4650.11	10.21	10.39	83.59	238.19	2121.43	2135.85	2115.25	103.72	
4700.00	4700.00	4752.52	4751.11	10.43	10.64	83.49	241.77	2117.67	2132.55	2111.48	101.22	
4800.00	4800.00	4859.64	4858.12	10.66	10.90	83.40	244.69	2113.81	2129.29	2107.74	98.81	
4900.00	4900.00	4960.79	4959.16	10.88	11.14	83.32	246.97	2109.73	2125.54	2103.52	96.55	
5000.00	5000.00	5062.88	5061.14	11.10	11.39	83.24	249.78	2105.72	2121.96	2099.48	94.38	
5100.00	5100.00	5180.48	5178.60	11.33	11.66	83.15	252.32	2100.57	2117.88	2094.90	92.16	
5200.00	5200.00	5278.77	5276.75	11.55	11.88	83.08	254.25	2095.78	2113.27	2089.84	90.21	
5300.00	5300.00	5383.74	5381.60	11.78	12.10	83.04	255.37	2090.83	2108.72	2084.85	88.32	
5400.00	5400.00	5469.23	5466.99	12.00	12.28	83.01	255.75	2086.93	2104.26	2079.99	86.68	
5500.00	5500.00	5557.72	5555.42	12.23	12.46	83.00	255.83	2083.63	2100.56	2075.88	85.12	
5600.00	5600.00	5652.53	5650.18	12.45	12.65	82.99	255.85	2080.42	2097.21	2072.11	83.58	
5700.00	5700.00	5746.87	5744.47	12.68	12.84	82.97	256.33	2077.38	2094.06	2068.55	82.09	
5800.00	5800.00	5827.74	5825.31	12.90	13.01	82.97	256.04	2075.20	2091.38	2065.49	80.77	
5900.00	5900.00	5900.00	5897.56	13.13	13.17	82.96	256.19	2074.33	2090.15	2063.87	79.53	
6000.00	6000.00	5967.25	5964.81	13.35	13.28	82.95	256.55	2074.48	2090.36	2063.75	78.58	
6100.00	6100.00	6051.82	6049.37	13.58	13.38	82.95	256.71	2075.58	2091.65	2064.71	77.63	
6200.00	6200.00	6151.78	6149.32	13.80	13.48	82.95	256.95	2077.22	2093.31	2066.04	76.76	
6300.00	6300.00	6265.81	6263.34	14.03	13.66	82.93	257.93	2078.56	2094.59	2066.92	75.68	
6400.00	6400.00	6396.40	6393.91	14.25	13.95	82.88	259.68	2078.64	2094.84	2066.64	74.30	
6409.71	6409.71	6410.57	6408.08	14.27	13.99	82.87	259.92	2078.52	2094.77	2066.52	74.15	
6425.00	6425.00	6433.48	6430.99	14.31	14.04	354.80	260.23	2078.26	2094.38	2066.05	73.93	
6450.00	6449.95	6470.85	6468.35	14.36	14.13	354.76	260.59	2077.67	2092.57	2064.13	73.58	
6475.00	6474.80	6504.29	6501.78	14.42	14.20	354.71	260.74	2076.98	2089.33	2060.82	73.29	
6500.00	6499.46	6524.08	6521.57	14.47	14.24	354.65	260.77	2076.57	2084.79	2056.28	73.15	
6525.00	6523.88	6543.68	6541.16	14.53	14.27	354.57	260.78	2076.21	2079.03	2050.56	73.04	
6550.00	6547.99	6563.03	6560.51	14.59	14.31	354.47	260.76	2075.90	2072.06	2043.66	72.96	
6575.00	6571.72	6582.08	6579.56	14.64	14.34	354.35	260.72	2075.65	2063.91	2035.61	72.93	
6600.00	6595.00	6600.95	6598.43	14.70	14.37	354.21	260.65	2075.44	2054.59	2026.42	72.93	
6625.00	6617.78	6622.73	6620.21	14.77	14.41	354.05	260.57	2075.22	2044.10	2016.08	72.96	
6650.00	6639.98	6643.96	6641.44	14.83	14.44	353.85	260.49	2075.02	2032.46	2004.62	73.01	
6675.00	6661.56	6664.58	6662.06	14.90	14.48	353.62	260.43	2074.84	2019.69	1992.06	73.10	
6700.00	6682.44	6684.54	6682.02	14.98	14.51	353.35	260.37	2074.66	2005.82	1978.42	73.21	
6725.00	6702.58	6703.45	6700.93	15.06	14.54	353.04	260.32	2074.51	1990.91	1963.76	73.35	
6750.00	6721.91	6720.32	6717.80	15.15	14.55	352.68	260.27	2074.38	1974.99	1948.13	73.53	
6775.00	6740.39	6736.47	6733.95	15.26	14.57	352.27	260.19	2074.29	1958.11	1931.55	73.72	
6800.00	6757.97	6751.86	6749.33	15.38	14.59	351.79	260.10	2074.22	1940.33	1914.08	73.92	
6825.00	6774.58	6766.43	6763.91	15.51	14.60	351.22	260.00	2074.17	1921.67	1895.74	74.10	
6850.00	6790.20	6780.17	6777.64	15.66	14.62	350.56	259.88	2074.14	1902.20	1876.58	74.25	
6875.00	6804.77	6793.01	6790.49	15.83	14.63	349.76	259.76	2074.12	1881.95	1856.64	74.34	
6900.00	6818.27	6804.89	6802.36	16.01	14.64	348.81	259.64	2074.12	1861.00	1835.97	74.36	
6925.00	6830.64	6815.73	6813.20	16.22	14.65	347.64	259.54	2074.13	1839.38	1814.61	74.26	



Weatherford Anticollision Report



Company: Devon Energy Date: 3/4/2013 Time: 14:04:47 Page: 3
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H Co-ordinate(N/E) Reference: Well: Onyx PWU 29 7H, Grid North
Reference Well: Onyx PWU 29 7H Vertical (TVD) Reference: SITE 3323.0
Reference Wellpath: Db: Sybase

Site: Exist. PWU 28#3
Well: Exist. PWU 28#3
Wellpath: 1 VO

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
6950.00	6841.86	6825.59	6823.06	16.45	14.65	346.19	259.46	2074.14	1817.16	1792.60	73.96	
6975.00	6851.89	6834.44	6831.91	16.70	14.66	344.36	259.39	2074.15	1794.40	1769.95	73.38	
7000.00	6860.71	6842.24	6839.71	16.98	14.66	341.99	259.34	2074.17	1771.16	1746.69	72.38	
7025.00	6868.30	6848.98	6846.45	17.28	14.66	338.82	259.30	2074.19	1747.49	1722.79	70.75	
7050.00	6874.63	6854.62	6852.10	17.60	14.67	334.43	259.27	2074.21	1723.47	1698.22	68.25	
7075.00	6879.68	6859.16	6856.63	17.94	14.67	328.07	259.25	2074.23	1699.15	1672.83	64.56	
7100.00	6883.45	6862.57	6860.04	18.30	14.67	318.43	259.23	2074.24	1674.61	1646.46	59.50	
7125.00	6885.91	6864.84	6862.32	18.68	14.67	303.43	259.22	2074.25	1649.90	1619.07	53.52	
7146.63	6887.00	6865.88	6863.35	19.02	14.67	284.82	259.22	2074.25	1628.45	1595.29	49.11	
7200.00	6888.46	6867.37	6864.84	19.91	14.68	284.40	259.21	2074.26	1575.47	1541.42	46.27	
7300.00	6891.20	6870.19	6867.66	21.74	14.68	283.59	259.20	2074.27	1476.29	1440.40	41.13	
7400.00	6893.94	6873.04	6870.51	23.75	14.68	282.77	259.19	2074.28	1377.22	1339.31	36.33	
7500.00	6896.68	6875.93	6873.40	25.89	14.68	281.94	259.18	2074.30	1278.29	1238.21	31.90	
7600.00	6899.42	6878.85	6876.32	28.14	14.68	281.09	259.17	2074.31	1179.52	1137.17	27.85	
7700.00	6902.16	6881.81	6879.28	30.47	14.68	280.22	259.17	2074.33	1080.98	1036.26	24.17	
7800.00	6904.90	6884.80	6882.27	32.87	14.69	279.34	259.16	2074.34	982.72	935.56	20.84	
7900.00	6907.64	6887.83	6885.30	35.31	14.69	278.44	259.16	2074.36	884.84	835.19	17.82	
8000.00	6910.37	6890.90	6888.37	37.80	14.69	277.53	259.15	2074.37	787.48	735.29	15.09	
8100.00	6913.11	6894.01	6891.48	40.32	14.69	276.60	259.15	2074.39	690.86	636.10	12.61	
8200.00	6915.85	6897.16	6894.63	42.87	14.69	275.66	259.14	2074.41	595.35	537.98	10.38	
8300.00	6918.59	6900.38	6897.85	45.44	14.69	274.69	259.14	2074.43	501.56	441.56	8.36	
8400.00	6921.33	6903.90	6901.37	48.03	14.70	273.62	259.14	2074.45	410.68	348.04	6.56	
8500.00	6924.07	6907.39	6904.86	50.64	14.70	272.57	259.13	2074.47	325.17	259.87	4.98	
8600.00	6926.81	6910.83	6908.30	53.26	14.70	271.53	259.13	2074.49	250.57	182.63	3.69	
8700.00	6929.55	6914.23	6911.70	55.89	14.70	270.50	259.12	2074.51	199.54	128.95	2.83	
8800.00	6932.29	6917.59	6915.06	58.54	14.70	269.48	259.11	2074.53	191.89	118.68	2.62	
8900.00	6935.03	6920.91	6918.38	61.19	14.71	268.47	259.10	2074.55	231.96	156.12	3.06	
9000.00	6937.77	6924.19	6921.66	63.85	14.71	267.47	259.09	2074.56	301.28	222.81	3.84	
9100.00	6940.51	6927.44	6924.91	66.52	14.71	266.49	259.08	2074.58	384.34	303.25	4.74	
9200.00	6943.25	6930.65	6928.12	69.19	14.71	265.52	259.06	2074.60	473.96	390.28	5.66	
9300.00	6945.99	6933.82	6931.29	71.87	14.71	264.56	259.05	2074.61	567.04	480.79	6.57	
9400.00	6948.73	6936.96	6934.43	74.55	14.72	263.62	259.03	2074.62	662.13	573.32	7.46	
9500.00	6951.47	6940.06	6937.53	77.24	14.72	262.69	259.01	2074.64	758.47	667.12	8.30	
9600.00	6954.21	6943.13	6940.60	79.93	14.72	261.77	258.99	2074.65	855.64	761.78	9.12	
9700.00	6956.95	6946.17	6943.64	82.63	14.72	260.87	258.97	2074.66	953.39	857.04	9.89	
9800.00	6959.69	6949.17	6946.64	85.33	14.72	259.98	258.95	2074.67	1051.55	952.73	10.64	
9900.00	6962.43	6952.14	6949.61	88.03	14.72	259.11	258.93	2074.68	1150.02	1048.77	11.36	
10000.00	6965.17	6955.07	6952.54	90.73	14.73	258.25	258.91	2074.69	1248.72	1145.06	12.05	
10100.00	6967.91	6957.98	6955.45	93.44	14.73	257.41	258.88	2074.70	1347.61	1241.57	12.71	
10200.00	6970.65	6960.85	6958.32	96.15	14.73	256.58	258.86	2074.71	1446.65	1338.25	13.34	
10300.00	6973.39	6963.69	6961.16	98.86	14.73	255.76	258.83	2074.72	1545.80	1435.07	13.96	
10400.00	6976.13	6966.50	6963.97	101.57	14.73	254.96	258.81	2074.73	1645.06	1532.02	14.55	
10500.00	6978.86	6969.29	6966.76	104.29	14.73	254.17	258.78	2074.74	1744.39	1629.08	15.13	
10600.00	6981.60	6972.04	6969.51	107.00	14.74	253.40	258.75	2074.74	1843.79	1726.24	15.68	
10700.00	6984.34	6974.76	6972.23	109.72	14.74	252.64	258.72	2074.75	1943.25	1823.48	16.22	
10800.00	6987.08	6977.46	6974.93	112.44	14.74	251.89	258.69	2074.76	2042.75	1920.79	16.75	
10900.00	6989.82	6980.13	6977.60	115.16	14.74	251.16	258.66	2074.76	2142.30	2018.18	17.26	
11000.00	6992.56	6982.77	6980.24	117.88	14.74	250.44	258.63	2074.77	2241.89	2115.63	17.76	
11100.00	6995.30	6985.38	6982.85	120.61	14.74	249.73	258.60	2074.77	2341.51	2213.14	18.24	
11200.00	6998.04	6987.97	6985.44	123.33	14.74	249.04	258.57	2074.78	2441.15	2310.71	18.71	
11300.00	7000.78	6990.53	6988.00	126.05	14.75	248.36	258.54	2074.78	2540.82	2408.33	19.18	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H
Reference Well: Onyx PWU 29 7H
Reference Wellpath:

Date: 3/4/2013

Time: 14:04:47

Page: 4

Co-ordinate(N/E) Reference: Well: Onyx PWU 29 7H, Grid North
Vertical(TVD) Reference: SITE 3323.0

Db: Sybase

Site: Exist. PWU 28#3
Well: Exist. PWU 28#3
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation Distance Factor	Warning
		MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft		
11400.00	7003.52	6993.07	6990.53	128.78	14.75	247.69	258.51	2074.79	2640.52	2505.99	19.63	
11500.00	7006.26	6995.58	6993.04	131.51	14.75	247.04	258.47	2074.79	2740.23	2603.71	20.07	
11600.00	7009.00	6998.06	6995.53	134.23	14.75	246.39	258.44	2074.79	2839.96	2701.46	20.51	
11700.00	7011.74	7000.00	6997.47	136.96	14.75	245.90	258.41	2074.79	2939.71	2799.14	20.91	
11800.00	7014.48	7002.68	7000.14	139.69	14.75	245.22	258.37	2074.80	3039.47	2897.02	21.34	
11818.99	7015.00	7003.09	7000.56	140.21	14.75	245.11	258.37	2074.80	3058.41	2915.59	21.41	

Site: Onyx PWU 29 #3H
Well: 29 #3H
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation Distance Factor	Warning
		MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft		
0.00	0.00	8.14	8.14	0.00	0.01	55.67	342.45	501.46	607.23	607.22	64202.97	
100.00	100.00	109.84	109.84	0.09	0.13	55.62	342.78	501.03	607.07	606.85	2775.69	
200.00	200.00	211.43	211.42	0.32	0.26	55.49	343.68	499.87	606.63	606.05	1048.38	
300.00	300.00	312.19	312.16	0.54	0.53	55.32	344.84	498.30	606.00	604.93	565.76	
400.00	400.00	412.77	412.72	0.77	0.80	55.12	346.11	496.51	605.26	603.69	387.20	
500.00	500.00	512.17	512.09	0.99	1.06	54.92	347.44	494.70	604.53	602.48	294.53	
600.00	600.00	611.44	611.33	1.21	1.33	54.72	348.83	492.96	603.91	601.37	237.67	
700.00	700.00	709.69	709.57	1.44	1.58	54.54	350.10	491.57	603.50	600.48	199.58	
800.00	800.00	807.94	807.81	1.66	1.84	54.41	351.14	490.69	603.39	599.88	172.26	
900.00	900.00	905.98	905.85	1.89	2.05	54.33	351.99	490.31	603.58	599.64	153.36	
1000.00	1000.00	1004.16	1004.02	2.11	2.25	54.28	352.71	490.42	604.10	599.73	138.30	
1100.00	1100.00	1105.37	1105.23	2.34	2.43	54.25	353.26	490.72	604.66	599.89	126.74	
1200.00	1200.00	1206.53	1206.39	2.56	2.61	54.24	353.58	490.94	605.01	599.84	116.88	
1300.00	1300.00	1306.90	1306.76	2.79	2.84	54.22	353.90	491.00	605.25	599.62	107.58	
1400.00	1400.00	1407.19	1407.05	3.01	3.06	54.17	354.38	490.87	605.43	599.35	99.63	
1500.00	1500.00	1506.44	1506.29	3.24	3.30	54.13	354.88	490.78	605.65	599.11	92.63	
1600.00	1600.00	1605.89	1605.74	3.46	3.54	54.11	355.29	490.91	605.99	598.99	86.60	
1700.00	1700.00	1708.80	1708.65	3.69	3.74	54.08	355.59	490.86	606.12	598.69	81.60	
1800.00	1800.00	1811.32	1811.17	3.91	3.95	54.04	355.73	490.32	605.78	597.92	77.05	
1900.00	1900.00	1910.91	1910.76	4.14	4.16	53.99	355.87	489.62	605.29	596.99	72.96	
2000.00	2000.00	2010.78	2010.62	4.36	4.37	53.93	356.11	488.92	604.87	596.14	69.29	
2100.00	2100.00	2113.07	2112.92	4.59	4.57	53.88	356.18	488.08	604.24	595.09	66.01	
2200.00	2200.00	2214.98	2214.81	4.81	4.76	53.84	355.91	487.02	603.24	593.67	63.01	
2300.00	2300.00	2314.67	2314.50	5.04	4.93	53.81	355.51	485.95	602.14	592.17	60.42	
2400.00	2400.00	2414.41	2414.23	5.26	5.10	53.79	355.09	484.95	601.08	590.72	58.02	
2500.00	2500.00	2514.32	2514.13	5.49	5.28	53.76	354.68	483.97	600.05	589.29	55.73	
2600.00	2600.00	2614.43	2614.24	5.71	5.47	53.74	354.30	482.99	599.04	587.86	53.60	
2700.00	2700.00	2715.72	2715.53	5.93	5.66	53.71	353.85	481.87	597.89	586.29	51.55	
2800.00	2800.00	2816.80	2816.59	6.16	5.86	53.68	353.32	480.55	596.52	584.50	49.62	
2900.00	2900.00	2916.79	2916.58	6.38	6.07	53.64	352.77	479.17	595.08	582.63	47.78	
3000.00	3000.00	3016.80	3016.57	6.61	6.28	53.60	352.24	477.77	593.64	580.75	46.06	
3100.00	3100.00	3116.86	3116.62	6.83	6.50	53.55	351.79	476.30	592.19	578.85	44.40	
3200.00	3200.00	3216.48	3216.23	7.06	6.73	53.49	351.45	474.74	590.74	576.95	42.84	
3300.00	3300.00	3314.00	3313.73	7.28	6.97	53.42	351.34	473.39	589.55	575.30	41.36	
3400.00	3400.00	3411.87	3411.60	7.51	7.21	53.34	351.52	472.32	588.79	574.07	40.00	
3500.00	3500.00	3512.34	3512.07	7.73	7.47	53.25	351.90	471.22	588.13	572.93	38.68	
3600.00	3600.00	3611.96	3611.67	7.96	7.73	53.13	352.42	469.94	587.41	571.73	37.45	
3700.00	3700.00	3705.71	3705.42	8.18	7.94	53.00	353.47	469.04	587.32	571.20	36.43	
3800.00	3800.00	3799.45	3799.14	8.41	8.15	52.84	355.35	468.76	588.29	571.74	35.53	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H
Reference Well: Onyx PWU 29 7H
Reference Wellpath:

Date: 3/4/2013

Time: 14:04:47

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Co-ordinate(N/E) Reference: Well: Onyx PWU 29 7H, Grid North
Vertical (TVD) Reference: SITE 3323.0

Db: Sybase

Site: Onyx PWU 29 #3H
Well: 29 #3H
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3900.00	3900.00	3906.39	3906.05	8.63	8.39	52.62	357.74	468.18	589.22	572.19	34.61	
4000.00	4000.00	4012.58	4012.20	8.86	8.64	52.36	359.64	466.39	588.97	571.47	33.66	
4100.00	4100.00	4113.03	4112.62	9.08	8.90	52.12	361.14	464.28	588.22	570.23	32.71	
4200.00	4200.00	4213.21	4212.77	9.31	9.16	51.90	362.46	462.20	587.40	568.93	31.81	
4300.00	4300.00	4311.57	4311.10	9.53	9.42	51.69	363.73	460.37	586.73	567.78	30.96	
4400.00	4400.00	4410.08	4409.59	9.76	9.67	51.49	365.07	458.82	586.34	566.91	30.18	
4500.00	4500.00	4509.81	4509.30	9.98	9.93	51.31	366.40	457.44	586.09	566.18	29.43	
4600.00	4600.00	4609.62	4609.10	10.21	10.19	51.14	367.63	456.19	585.89	565.50	28.73	
4700.00	4700.00	4710.10	4709.55	10.43	10.45	50.88	369.51	454.38	585.66	564.78	28.05	
4800.00	4800.00	4810.66	4810.02	10.66	10.71	50.48	372.51	451.54	585.37	564.00	27.40	
4900.00	4900.00	4912.74	4911.97	10.88	10.98	49.97	376.16	447.82	584.86	563.00	26.76	
5000.00	5000.00	5014.16	5013.21	11.10	11.24	49.40	380.02	443.45	584.03	561.68	26.13	
5100.00	5100.00	5112.02	5110.89	11.33	11.50	48.82	384.11	439.00	583.33	560.50	25.55	
5200.00	5200.00	5210.11	5208.78	11.55	11.76	48.19	388.66	434.60	583.04	559.73	25.01	
5300.00	5300.00	5310.56	5309.01	11.78	12.02	47.55	393.44	430.07	582.88	559.08	24.49	
5400.00	5400.00	5410.86	5409.09	12.00	12.28	46.90	398.12	425.48	582.69	558.41	23.99	
5500.00	5500.00	5510.01	5508.05	12.23	12.54	46.29	402.57	421.13	582.60	557.82	23.52	
5600.00	5600.00	5608.91	5606.78	12.45	12.80	45.72	406.81	417.14	582.67	557.42	23.07	
5700.00	5700.00	5704.78	5702.47	12.68	13.05	45.15	411.30	413.50	583.25	557.52	22.67	
5800.00	5800.00	5800.60	5798.09	12.90	13.30	44.55	416.55	410.02	584.57	558.37	22.31	
5900.00	5900.00	5899.18	5896.43	13.13	13.55	43.91	422.37	406.62	586.41	559.73	21.98	
6000.00	6000.00	5997.76	5994.79	13.35	13.80	43.29	428.25	403.45	588.52	561.37	21.68	
6100.00	6100.00	6099.77	6096.57	13.58	14.06	42.66	434.25	400.15	590.61	562.98	21.37	
6200.00	6200.00	6201.88	6198.45	13.80	14.32	42.03	439.98	396.54	592.39	564.26	21.06	
6300.00	6300.00	6304.13	6300.49	14.03	14.59	41.40	445.37	392.71	593.82	565.21	20.75	
6400.00	6400.00	6406.53	6402.69	14.25	14.86	40.80	450.32	388.72	594.91	565.80	20.44	
6409.71	6409.71	6416.64	6412.78	14.27	14.88	40.74	450.78	388.32	595.00	565.84	20.41	
6425.00	6425.00	6432.55	6428.67	14.31	14.93	312.57	451.48	387.69	594.95	565.72	20.35	
6450.00	6449.95	6458.49	6454.56	14.36	15.00	312.25	452.58	386.67	594.13	564.79	20.25	
6475.00	6474.80	6484.26	6480.29	14.42	15.06	311.75	453.60	385.66	592.40	562.97	20.12	
6500.00	6499.46	6509.80	6505.79	14.47	15.13	311.08	454.56	384.65	589.79	560.27	19.98	
6525.00	6523.88	6535.04	6531.00	14.53	15.20	310.23	455.44	383.66	586.32	556.72	19.81	
6550.00	6547.99	6559.90	6555.83	14.59	15.26	309.20	456.25	382.69	582.02	552.36	19.62	
6575.00	6571.72	6584.33	6580.22	14.64	15.33	307.99	456.99	381.74	576.95	547.23	19.41	
6600.00	6595.00	6608.27	6604.14	14.70	15.39	306.60	457.66	380.80	571.16	541.37	19.17	
6625.00	6617.78	6631.69	6627.53	14.77	15.45	305.02	458.29	379.86	564.70	534.84	18.91	
6650.00	6639.98	6654.42	6650.23	14.83	15.51	303.27	458.86	378.92	557.64	527.71	18.63	
6675.00	6661.56	6676.40	6672.19	14.90	15.57	301.34	459.39	377.98	550.06	520.03	18.32	
6700.00	6682.44	6697.58	6693.35	14.98	15.62	299.25	459.87	377.04	542.05	511.91	17.99	
6725.00	6702.58	6717.90	6713.63	15.06	15.68	297.02	460.31	376.12	533.71	503.43	17.63	
6750.00	6721.91	6737.28	6733.00	15.15	15.73	294.66	460.70	375.22	525.13	494.70	17.26	
6775.00	6740.39	6755.69	6751.38	15.26	15.78	292.23	461.06	374.35	516.44	485.82	16.87	
6800.00	6757.97	6773.07	6768.74	15.38	15.82	289.73	461.38	373.50	507.75	476.93	16.47	
6825.00	6774.58	6789.38	6785.02	15.51	15.86	287.23	461.66	372.70	499.19	468.14	16.07	
6850.00	6790.20	6804.31	6799.94	15.66	15.90	284.78	461.91	371.94	490.91	459.61	15.68	
6875.00	6804.77	6817.63	6813.23	15.83	15.94	282.46	462.13	371.28	483.04	451.48	15.31	
6900.00	6818.27	6829.88	6825.47	16.01	15.97	280.25	462.33	370.68	475.73	443.90	14.95	
6925.00	6830.64	6841.03	6836.60	16.22	16.00	278.20	462.52	370.14	469.12	437.01	14.61	
6950.00	6841.86	6851.05	6846.61	16.45	16.03	276.34	462.69	369.67	463.33	430.93	14.30	
6975.00	6851.89	6859.91	6855.46	16.70	16.05	274.71	462.84	369.25	458.50	425.79	14.02	
7000.00	6860.71	6867.57	6863.11	16.98	16.07	273.33	462.98	368.90	454.72	421.71	13.77	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H
Reference Well: Onyx PWU 29 7H
Reference Wellpath:

Date: 3/4/2013

Time: 14:04:47

Page: 6

Co-ordinate(NE) Reference: Well: Onyx PWU 29 7H, Grid North
Vertical (TVD) Reference: SITE 3323.0

Db: 'Sybase

Site: Onyx PWU 29 #3H
Well: 29 #3H
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
7025.00	6868.30	6874.02	6869.55	17.28	16.09	272.22	463.09	368.60	452.12	418.78	13.56	
7050.00	6874.63	6879.22	6874.74	17.60	16.10	271.41	463.18	368.36	450.75	417.08	13.39	
7075.00	6879.68	6883.15	6878.67	17.94	16.11	270.91	463.25	368.19	450.70	416.68	13.25	
7100.00	6883.45	6885.81	6881.33	18.30	16.12	270.73	463.29	368.07	451.98	417.59	13.14	
7125.00	6885.91	6887.18	6882.69	18.68	16.12	270.88	463.32	368.01	454.61	419.84	13.08	
7146.63	6887.00	6887.30	6882.82	19.02	16.12	271.27	463.32	368.00	457.95	422.85	13.05	
7200.00	6888.46	6886.41	6881.93	19.91	16.12	271.38	463.31	368.04	470.36	434.38	13.07	
7300.00	6891.20	6884.71	6880.23	21.74	16.11	271.59	463.28	368.12	508.08	470.28	13.44	
7400.00	6893.94	6883.00	6878.52	23.75	16.11	271.81	463.25	368.19	561.29	521.50	14.11	
7500.00	6896.68	6881.25	6876.78	25.89	16.10	272.03	463.21	368.27	626.05	584.13	14.93	
7600.00	6899.42	6879.49	6875.01	28.14	16.10	272.26	463.18	368.35	699.17	655.00	15.83	
7700.00	6902.16	6877.70	6873.22	30.47	16.10	272.49	463.15	368.43	778.28	731.79	16.74	
7800.00	6904.90	6875.88	6871.41	32.87	16.09	272.72	463.12	368.52	861.74	812.87	17.63	
7900.00	6907.64	6874.03	6869.56	35.31	16.09	272.95	463.09	368.60	948.40	897.10	18.49	
8000.00	6910.37	8515.78	7827.15	37.80	29.30	202.78	425.36	1281.84	985.92	953.09	30.04	
8100.00	6913.11	8622.56	7832.75	40.32	31.72	202.39	422.96	1388.45	986.13	951.52	28.49	
8200.00	6915.85	8734.85	7836.36	42.87	34.35	201.97	419.10	1500.61	983.92	947.48	27.00	
8300.00	6918.59	8825.66	7839.65	45.44	36.53	201.61	415.77	1591.30	982.14	944.06	25.79	
8400.00	6921.33	8933.55	7844.08	48.03	39.18	201.15	411.68	1699.01	980.82	940.99	24.63	
8500.00	6924.07	9048.36	7846.48	50.64	42.03	200.78	408.42	1813.75	977.98	936.26	23.44	
8600.00	6926.81	9137.88	7847.66	53.26	44.28	200.58	407.28	1903.26	975.01	931.53	22.42	
8700.00	6929.55	9242.49	7848.65	55.89	46.91	200.44	407.68	2007.86	972.27	926.76	21.36	
8800.00	6932.29	9335.11	7849.17	58.54	49.25	200.42	409.63	2100.46	969.78	922.25	20.40	
8900.00	6935.03	9447.97	7849.98	61.19	52.21	200.35	411.42	2213.30	967.30	917.53	19.44	
9000.00	6937.77	9573.68	7848.78	63.85	55.52	200.09	409.22	2338.98	961.94	910.05	18.54	
9100.00	6940.51	9678.69	7846.88	66.52	58.28	199.81	406.11	2443.92	955.50	901.78	17.78	
9200.00	6943.25	9761.06	7845.78	69.19	60.45	199.56	403.35	2526.23	949.45	894.15	17.17	
9300.00	6945.99	9844.45	7846.68	71.87	62.64	199.28	400.83	2609.58	945.71	888.90	16.65	
9400.00	6948.73	9929.06	7847.83	74.55	64.88	199.13	400.57	2694.18	943.23	884.72	16.12	
9500.00	6951.47	10011.25	7850.99	77.24	67.07	198.93	400.16	2776.30	942.97	882.90	15.70	
9600.00	6954.21	10111.21	7855.58	79.93	69.73	198.64	399.23	2876.15	943.33	881.62	15.29	
9700.00	6956.95	10213.83	7860.66	82.63	72.47	198.32	397.86	2978.64	943.95	880.66	14.92	
9800.00	6959.69	10326.03	7865.59	85.33	75.48	197.83	393.72	3090.65	943.31	878.65	14.59	
9900.00	6962.43	10423.74	7869.32	88.03	78.11	197.41	390.21	3188.23	942.23	876.31	14.29	
10000.00	6965.17	10542.26	7873.58	90.73	81.29	196.89	385.58	3306.58	940.98	873.78	14.00	
10100.00	6967.91	10650.29	7875.31	93.44	84.21	196.43	381.02	3414.50	937.70	869.27	13.70	
10200.00	6970.65	10747.19	7876.58	96.15	86.83	196.04	377.27	3511.31	934.30	864.70	13.42	
10300.00	6973.39	10841.26	7878.27	98.86	89.37	195.66	373.66	3605.30	931.42	860.70	13.17	
10400.00	6976.13	10939.49	7880.31	101.57	92.03	195.26	370.15	3703.45	928.93	857.10	12.93	
10500.00	6978.86	11028.90	7882.60	104.29	94.46	194.94	367.67	3792.80	927.15	854.22	12.71	
10600.00	6981.60	11119.84	7885.72	107.00	96.92	194.63	365.83	3883.66	926.45	852.37	12.51	
10700.00	6984.34	11213.30	7889.64	109.72	99.45	194.33	364.33	3977.03	926.60	851.37	12.32	
10800.00	6987.08	11307.71	7893.93	112.44	102.00	194.03	363.01	4071.33	927.21	850.82	12.14	
10900.00	6989.82	11437.81	7898.16	115.16	105.54	193.63	360.82	4201.33	926.43	848.68	11.92	
11000.00	6992.56	11537.67	7899.98	117.88	108.26	193.32	358.83	4301.16	924.28	845.39	11.72	
11100.00	6995.30	11634.55	7901.95	120.61	110.89	193.02	356.95	4398.00	922.38	842.39	11.53	
11200.00	6998.04	11733.02	7904.11	123.33	113.57	192.74	355.62	4496.43	920.79	839.64	11.35	
11300.00	7000.78	11834.75	7906.18	126.05	116.32	192.49	354.75	4598.14	919.18	836.79	11.16	
11400.00	7003.52	11922.91	7907.99	128.78	118.73	192.29	354.37	4686.28	917.74	834.17	10.98	
11500.00	7006.26	12008.56	7911.85	131.51	121.05	192.03	353.24	4771.83	918.43	833.91	10.87	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Onyx PWU 29 7H
Reference Well: Onyx PWU 29 7H
Reference Wellpath:

Date: 3/4/2013 Time: 14:04:47 Page: 7
Co-ordinate(NE) Reference: Well: Onyx PWU 29 7H, Grid North
Vertical (TVD) Reference: SITE 3323.0
Db: Sybase

Site: Onyx PWU 29 #3H
Well: 29 #3H
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
11600.00	7009.00	12105.41	7916.27	134.23	123.68	191.80	353.19	4868.58	919.51	833.80	10.73	
11700.00	7011.74	12193.31	7921.51	136.96	126.10	191.51	351.96	4956.31	921.71	835.13	10.65	
11800.00	7014.48	12284.03	7927.86	139.69	128.55	191.22	351.12	5046.81	925.04	837.55	10.57	
11818.99	7015.00	12302.98	7929.26	140.21	129.07	191.17	350.99	5065.71	925.77	838.09	10.56	

**Weatherford****Weatherford Drilling Services**

GeoDec v5.03

Report Date: March 04, 2013

Job Number: _____

Customer: Devon Energy

Well Name: Onyx PWU 29 #7H

API Number: _____

Rig Name: _____

Location: Eddy Co., NM

Block: _____

Engineer: RWJ

US State Plane 1983

System: New Mexico Eastern Zone

Projection: Transverse Mercator/Gauss Kruger

Datum: North American Datum 1983

Ellipsoid: GRS 1980

North/South 592834.360 USFT

East/West 611277.170 USFT

Grid Convergence: 12°

Total Correction: +7.64°

Geodetic Latitude / Longitude

System: Latitude / Longitude

Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Latitude 32.6295458 DEG

Longitude -104.1061471 DEG

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 32.62955° N 32° 37 min 46.365 sec

Longitude = 104.10615° W 104° 6 min 22.129 sec

Magnetic Declination = 7.76° [True North Offset]

Local Gravity = .9988 g CheckSum = 6692

Local Field Strength = 48626 nT Magnetic Vector X = 23809 nT

Magnetic Dip = 60.39° Magnetic Vector Y = 3244 nT

Magnetic Model = bggm2012 Magnetic Vector Z = 42274 nT

Spud Date = Mar 15, 2013 Magnetic Vector H = 24028 nT

Signed: _____

Date: _____