

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 15, 2009

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40583		² Pool Code 49622	³ Pool Name PARKWAY; BONE SPRING
⁴ Property Code 38434	⁵ Property Name TURQUOISE PWU "27"		⁶ Well Number 5H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.		⁹ Elevation 3337.5

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
A	27	19 S	29 E		990	NORTH	50	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

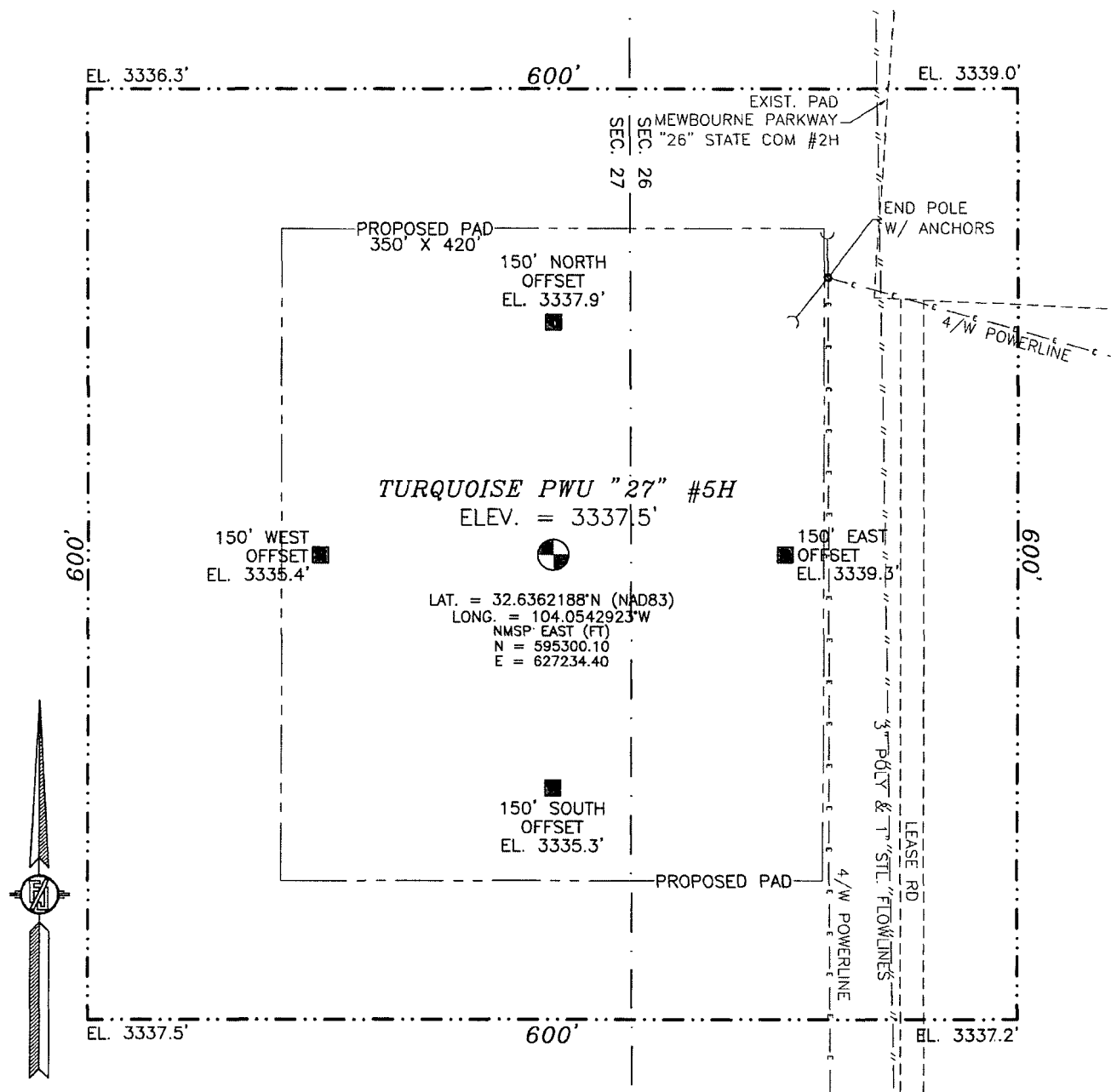
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	19 S	29 E		340	NORTH	340	WEST	EDDY

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

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.

N89°22'07"W 2632.22 FT NW CORNER SEC. 27 LAT. = 32.6390370°N LONG. = 104.0712463°W NMSP EAST (FT) N = 596312.05 E = 622012.94 340' BOTTOM OF HOLE BOTTOM OF HOLE LAT = 32.6380898°N LONG = 104.0701475°W NMSP EAST (FT) N = 595968.30 E = 622352.03 W O CORNER SEC. 27 LAT. = 32.6317485°N LONG = 104.0712904°W NMSP EAST (FT) N = 593660.44 E = 622005.89 SW CORNER SEC. 27 LAT. = 32.6244740°N LONG. = 104.0713099°W NMSP EAST (FT) N = 591013.90 E = 622006.42 S89°54'24"E 2644.63 FT		S89°50'52"W 2635.86 FT NE CORNER SEC. 27 LAT. = 32.6389396°N LONG. = 104.0541330°W NMSP EAST (FT) N = 596290.05 E = 627280.86 50' SURFACE LOCATION TURQUOISE PWU "27" #5H ELEV = 3337.5' LAT. = 32.6362188°N (NAD83) LONG = 104.0542923°W NMSP EAST (FT) N = 595300.10 E = 627234.40 E O CORNER SEC. 27 LAT. = 32.6316834°N LONG = 104.0541238°W NMSP EAST (FT) N = 593650.20 E = 627290.61 SE CORNER SEC. 27 LAT. = 32.6244132°N LONG. = 104.0541300°W NMSP EAST (FT) N = 591005.28 E = 627295.67 S89°54'24"E 2644.63 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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division <i>Judy A. Barnett</i> Signature Date Printed Name Judy A. Barnett Regulatory Specialist 8/7/12 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. MAY 11 2012 Date of Survey <i>Filimon F. Jaramillo</i> Signature and Seal of Professional Surveyor Certificate Number FILIMON F. JARAMILLO, PLS 12797 SURVEY NO. 964R
---	--	--	--	--

SECTION 27, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 210 (OLD LOCO) AND CR 235 (CURRY COMB) GO SOUTHEAST ON CR 235 FOR APPROX. 2.6 MILES. GO SOUTH APPROX. 0.4 OF A MILE. GO NORTHWEST APPROX. 0.7 OF A MILE TO MEWBOURNE PARKWAY "26" STATE COM #2H. LOCATION IS APPROX 500 FT SOUTHWEST.

DEVON ENERGY PRODUCTION COMPANY, L.P.

TURQUOISE PWU "27" #5H

LOCATED 990 FT. FROM THE NORTH LINE
AND 50 FT. FROM THE EAST LINE OF
SECTION 27, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 4, 2012

SURVEY NO. 964

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

NOT TO SCALE

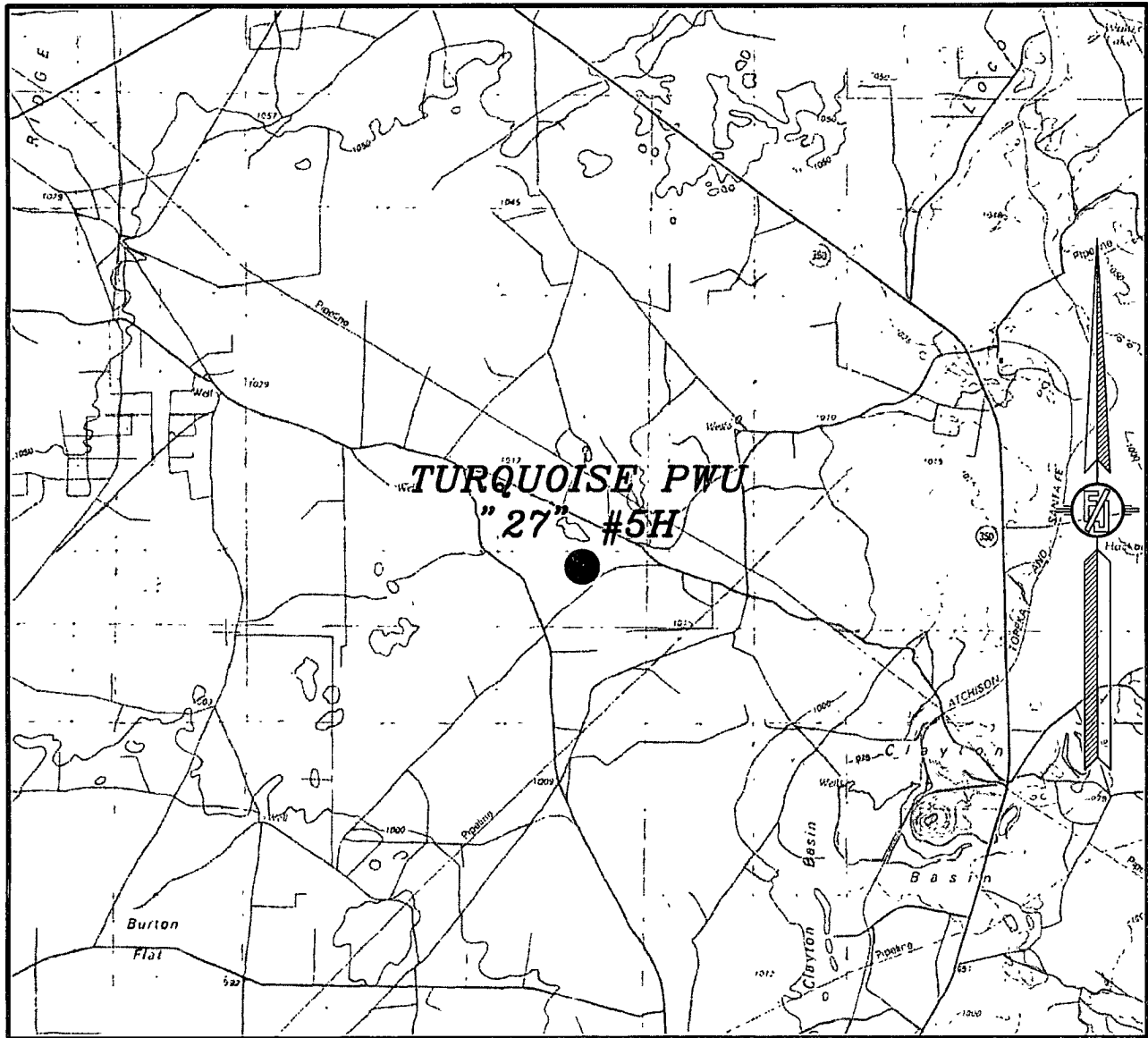
LOCATED 990 FT. FROM THE NORTH LINE
AND 50 FT. FROM THE EAST LINE OF
SECTION 27, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 964

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

301 SOUTH CANAL
(575) 234-3341

SECTION 27, 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.

TURQUOISE PWU "27" #5H

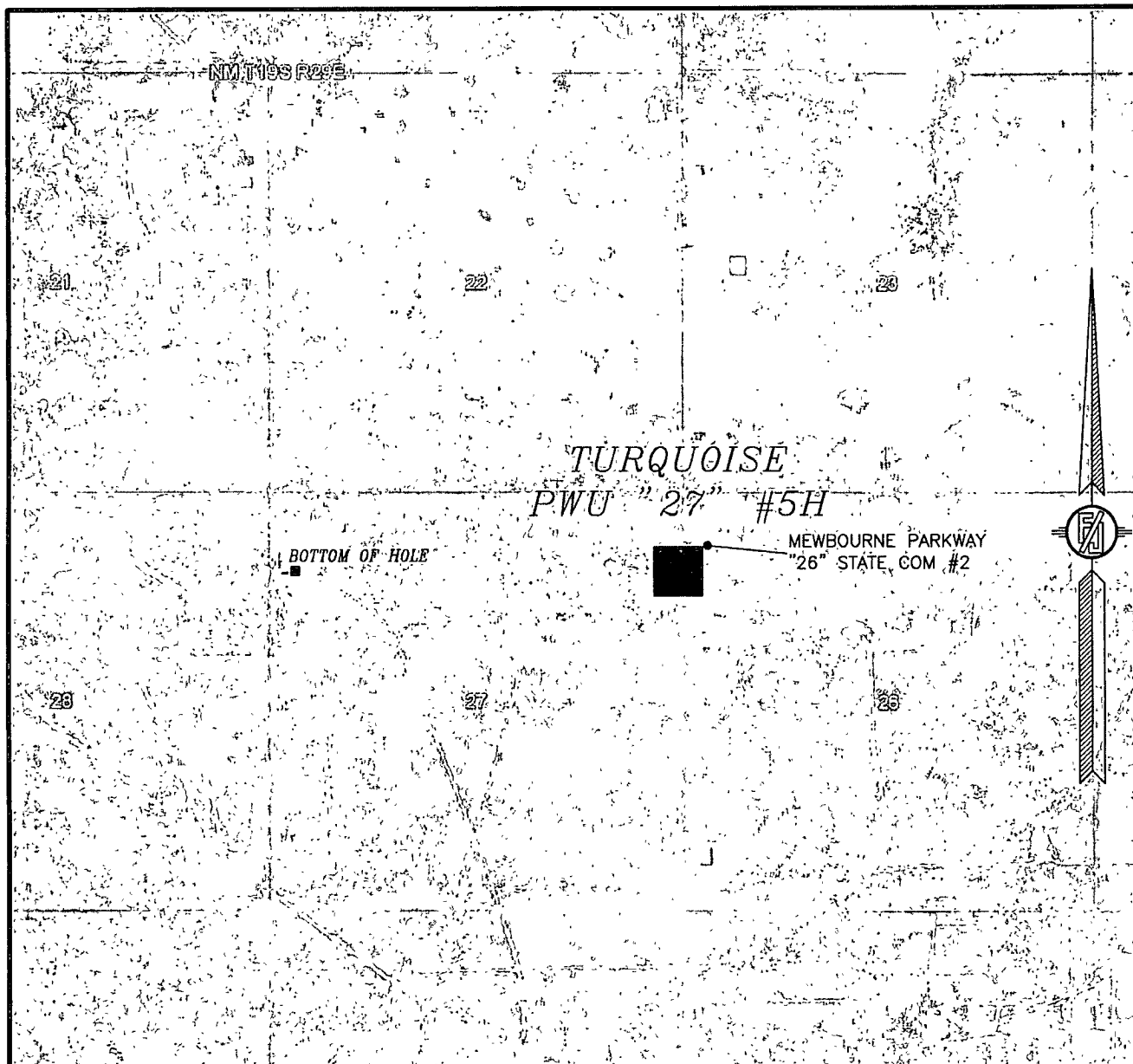
LOCATED 990 FT. FROM THE NORTH LINE
AND 50 FT. FROM THE EAST LINE OF
SECTION 27, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 4, 2012

SURVEY NO. 964

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

SECTION 27, 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.

TURQUOISE PWU "27" #5H

LOCATED 990 FT. FROM THE NORTH LINE
AND 50 FT. FROM THE EAST LINE OF
SECTION 27, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

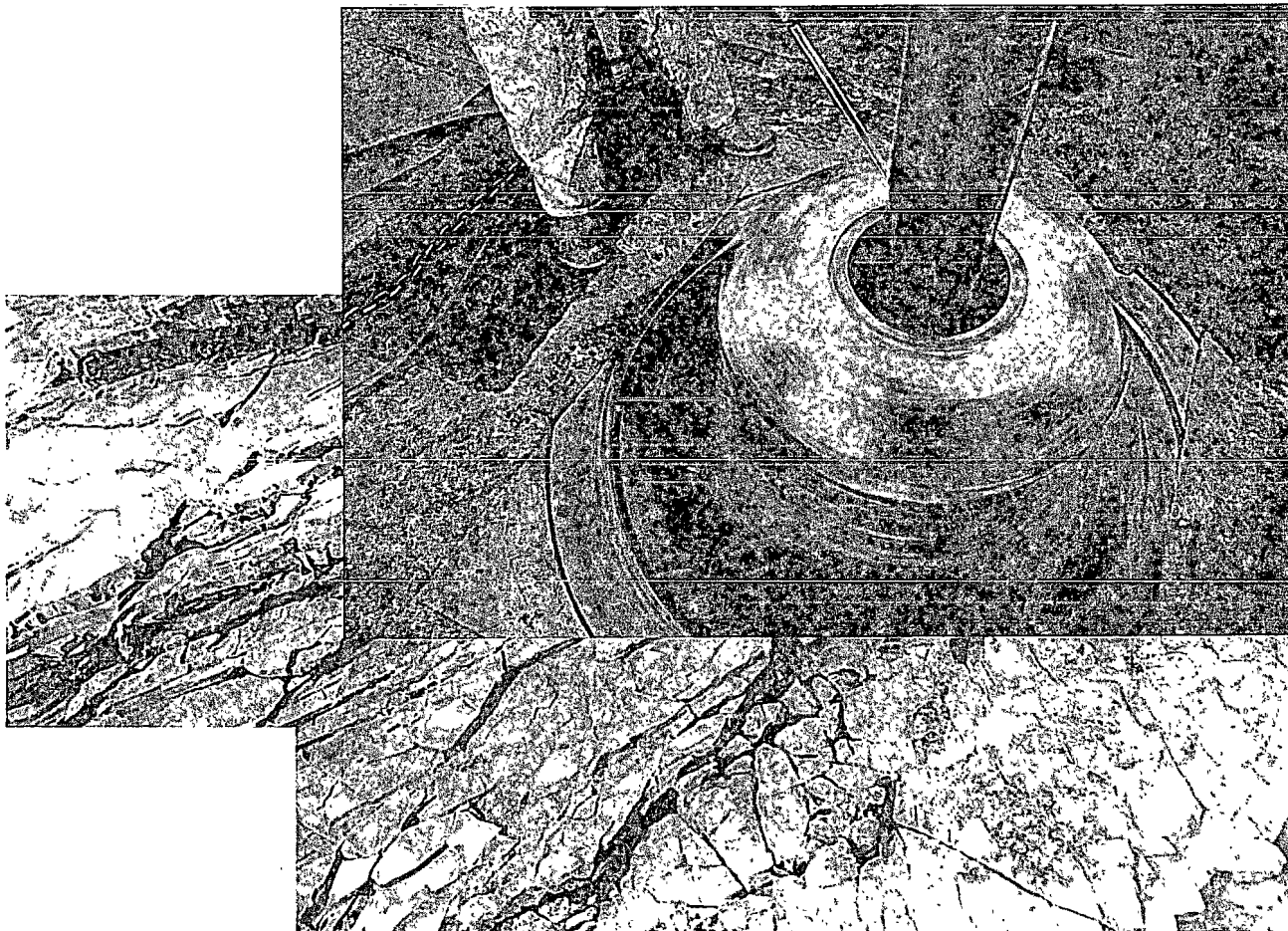
MAY 4, 2012

SURVEY NO. 964

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



Commitment Runs Deep



Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
June 2010

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

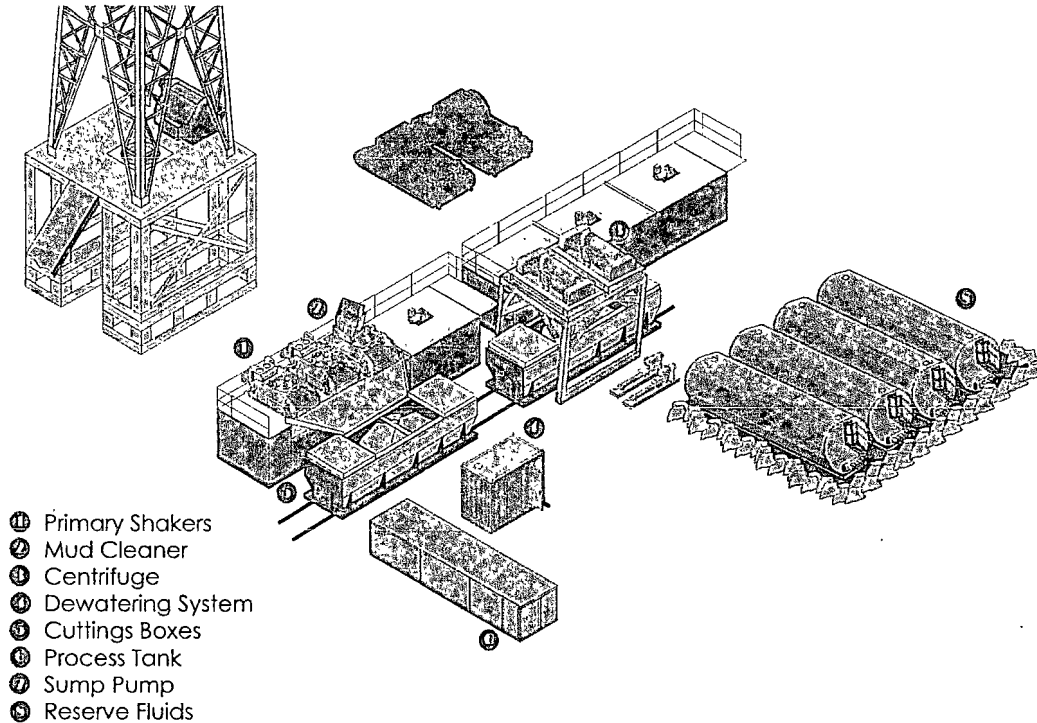
II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Closed Loop Schematic



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

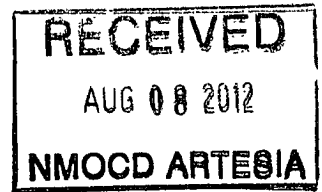
dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

III. Closure Plan

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.



Weatherford®

Drilling Services

Proposal



devon

TURQUOISE PWU 27 #5H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

JUNE 18, 2012

Weatherford International, Ltd.

P.O. Box 61028
Midland, TX 79711 USA
+1 432.561.8892 Main
+1 432 561.8895 Fax
www.weatherford.com



Turquoise PWU 27 #5H
Eddy Co, NM

K8 ELEV: 3357
GLELEV: 3338

SECTION DETAILS

Sec	MD	Inc	Asz	TVD	+N/-S	+E/-W	Deg	T Fac	VSec	Target
1	0.00	0.00	277.79	0.00	0.00	0.00	0.00	0.00	0.00	
2	6597.23	0.00	277.79	6597.23	0.00	0.00	0.00	0.00	0.00	
3	7511.75	91.45	277.79	7170.00	79.66	-582.05	10.00	277.79	587.47	
4	11853.55	91.45	277.79	7060.00	668.20	-4882.37	0.00	0.00	4927.88	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude	Slot
Turquoise PWU 27 #5H	0.00	0.00	595300.10	627234.40	32°38'10.376"N	104°03'15.467"W	N/A

TARGET DETAILS

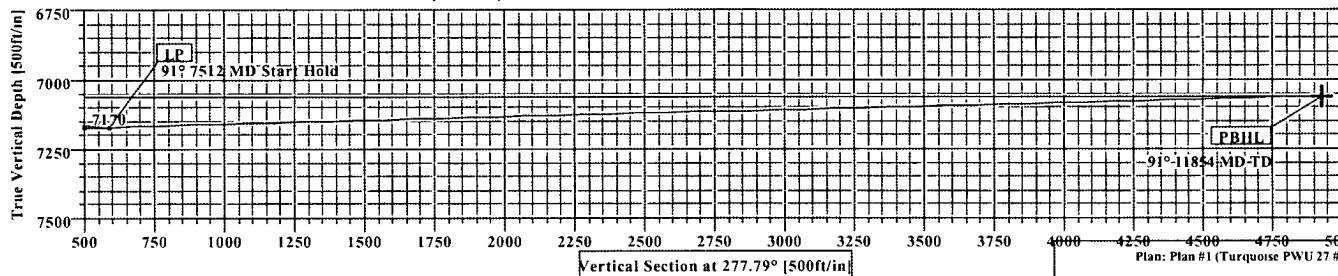
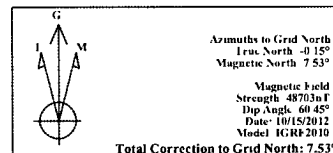
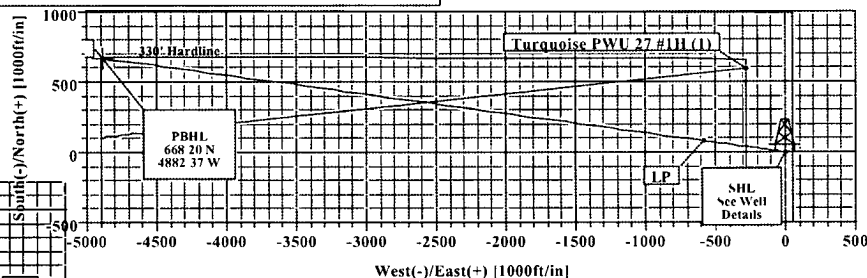
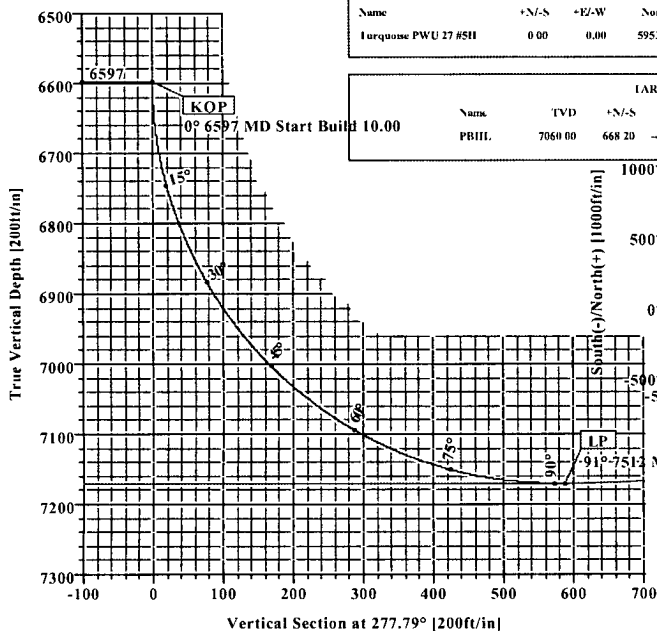
Name	TVD	+N/-S	+E/-W	Northing	Eastng	Shape
PBHL	7060.00	668.20	-4882.37	595968.30	622352.03	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Turquoise PWU 27 #5H
Site Centre Northing: 595300.10
Eastng: 627234.40
Ground Level: 3338.00
Positional Uncertainty: 0.00
Convergence: 0.15



Plan: Plan #1 (Turquoise PWU 27 #5H/1)
Created By: Russell W Joyner Date: 6/18/2012



Weatherford

WFT Plan Report - X & Y's



Company: Devon Energy Date: 6/18/2012 Time: 10.03 10 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: Turquoise PWU 27 #5H, Grid North
Site: Turquoise PWU 27 #5H Vertical (TVD) Reference: SITE 3357.0
Well: Turquoise PWU 27 #5H Section (VS) Reference: Well (0.00N,0.00E,277.79Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #1 Date Composed: 6/18/2012
Principal: Yes Version: 1
Tied-to: From Surface

Field: Eddy Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983 Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980 Coordinate System: Well Centre
Sys Datum: Mean Sea Level Geomagnetic Model: IGRF2010

Site: Turquoise PWU 27 #5H

Site Position: Northing: 595300.10 ft Latitude: 32 38 10.376 N
From: Map Easting: 627234.40 ft Longitude: 104 3 15.467 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3338.00 ft Grid Convergence: 0.15 deg

Well: Turquoise PWU 27 #5H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 595300.10 ft Latitude: 32 38 10.376 N
+E/-W 0.00 ft Easting: 627234.40 ft Longitude: 104 3 15.467 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Tie-on Depth: 0.00 ft
Magnetic Data: 10/15/2012 Height 3357.00 ft Above System Datum: Mean Sea Level
Field Strength: 48703 nT Declination: 7.68 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 277.79

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	277.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6597.23	0.00	277.79	6597.23	0.00	0.00	0.00	0.00	0.00	0.00	
7511.75	91.45	277.79	7170.00	79.66	-582.05	10.00	10.00	0.00	277.79	
11853.55	91.45	277.79	7060.00	668.20	-4882.37	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
6500.00	0.00	277.79	6500.00	0.00	0.00	0.00	0.00	595300.10	627234.40	
6597.23	0.00	277.79	6597.23	0.00	0.00	0.00	0.00	595300.10	627234.40	KOP
6600.00	0.28	277.79	6600.00	0.00	-0.01	0.01	10.00	595300.10	627234.39	
6650.00	5.28	277.79	6649.93	0.33	-2.41	2.43	10.00	595300.43	627231.99	
6700.00	10.28	277.79	6699.45	1.25	-9.11	9.19	10.00	595301.35	627225.29	
6750.00	15.28	277.79	6748.20	2.75	-20.06	20.25	10.00	595302.85	627214.34	
6800.00	20.28	277.79	6795.79	4.81	-35.18	35.51	10.00	595304.91	627199.22	
6850.00	25.28	277.79	6841.88	7.44	-54.35	54.86	10.00	595307.54	627180.05	
6900.00	30.28	277.79	6886.10	10.60	-77.43	78.15	10.00	595310.70	627156.97	
6950.00	35.28	277.79	6928.13	14.27	-104.24	105.21	10.00	595314.37	627130.16	
7000.00	40.28	277.79	6967.64	18.42	-134.58	135.83	10.00	595318.52	627099.82	
7050.00	45.28	277.79	7004.33	23.02	-168.21	169.78	10.00	595323.12	627066.19	
7100.00	50.28	277.79	7037.92	28.04	-204.88	206.79	10.00	595328.14	627029.52	
7150.00	55.28	277.79	7068.15	33.44	-244.32	246.60	10.00	595333.54	626990.08	
7200.00	60.28	277.79	7094.81	39.17	-286.21	288.88	10.00	595339.27	626948.19	
7250.00	65.28	277.79	7117.67	45.20	-330.25	333.33	10.00	595345.30	626904.15	
7300.00	70.28	277.79	7136.58	51.47	-376.09	379.60	10.00	595351.57	626858.31	



Weatherford

WFT Plan Report - X & Y's



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Turquoise PWU 27 #5H
Well: Turquoise PWU 27 #5H
Wellpath: 1

Date: 6/18/2012 Time: 10 03:10 Page: 2
Co-ordinate(NE) Reference: Well Turquoise PWU 27 #5H, Grid North
Vertical (TVD) Reference: SITE 3357.0
Section (VS) Reference: Well (0 00N,0 00E,277.79Azi)
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
7350.00	75 28	277.79	7151 38	57.95	-423.40	427.34	10.00	595358.05	626811.00	
7400.00	80 28	277.79	7161 96	64.57	-471 80	476.19	10 00	595364 67	626762 60	
7450.00	85 28	277.79	7168 24	71 29	-520 93	525.78	10 00	595371 39	626713.47	
7500.00	90 28	277.79	7170 18	78 07	-570.41	575 73	10.00	595378.17	626663.99	
7511.75	91 45	277.79	7170.00	79 66	-582.05	587 47	10.00	595379.76	626652.35	LP
7600 00	91.45	277.79	7167.77	91 62	-669 46	675 70	0 00	595391.72	626564 94	
7700 00	91.45	277.79	7165.23	105.18	-768 50	775 67	0 00	595405 28	626465.90	
7800.00	91.45	277.79	7162 70	118 73	-867 55	875 63	0 00	595418 83	626366.85	
7900 00	91 45	277.79	7160 17	132 29	-966 59	975 60	0 00	595432 39	626267 81	
8000 00	91 45	277.79	7157.63	145 84	-1065.64	1075 57	0 00	595445 94	626168 76	
8100 00	91 45	277.79	7155.10	159.40	-1164.68	1175 54	0 00	595459 50	626069 72	
8200 00	91.45	277.79	7152.57	172.95	-1263.73	1275.51	0 00	595473 05	625970.67	
8300 00	91 45	277.79	7150.03	186 51	-1362.77	1375.47	0 00	595486.61	625871 63	
8400.00	91 45	277.79	7147.50	200 06	-1461 81	1475 44	0.00	595500.16	625772.59	
8500 00	91.45	277.79	7144 97	213 62	-1560 86	1575 41	0.00	595513.72	625673.54	
8600 00	91.45	277.79	7142 43	227 17	-1659 90	1675 38	0 00	595527.27	625574.50	
8700.00	91 45	277.79	7139 90	240.73	-1758.95	1775.34	0 00	595540.83	625475 45	
8800.00	91.45	277.79	7137 36	254.28	-1857 99	1875 31	0 00	595554 38	625376.41	
8900.00	91.45	277.79	7134 83	267 84	-1957.04	1975 28	0 00	595567 94	625277 36	
9000 00	91 45	277.79	7132.30	281 39	-2056 08	2075.25	0 00	595581 49	625178 32	
9100.00	91.45	277.79	7129.76	294 95	-2155 13	2175.22	0.00	595595 05	625079 27	
9200.00	91.45	277.79	7127 23	308 51	-2254 17	2275.18	0.00	595608.61	624980 23	
9300 00	91.45	277.79	7124.70	322 06	-2353 22	2375 15	0.00	595622.16	624881.18	
9400 00	91 45	277.79	7122 16	335.62	-2452.26	2475 12	0.00	595635 72	624782.14	
9500 00	91 45	277.79	7119.63	349.17	-2551 31	2575 09	0 00	595649.27	624683.09	
9600 00	91.45	277.79	7117.10	362 73	-2650.35	2675 06	0.00	595662.83	624584.05	
9700.00	91.45	277.79	7114.56	376 28	-2749.39	2775 02	0 00	595676 38	624485 01	
9800.00	91.45	277.79	7112.03	389.84	-2848.44	2874.99	0 00	595689 94	624385.96	
9900.00	91 45	277.79	7109.50	403 39	-2947.48	2974.96	0 00	595703 49	624286.92	
10000.00	91.45	277.79	7106 96	416.95	-3046.53	3074 93	0.00	595717 05	624187 87	
10100.00	91.45	277.79	7104 43	430.50	-3145 57	3174 90	0 00	595730 60	624088 83	
10200.00	91.45	277.79	7101.89	444.06	-3244 62	3274 86	0.00	595744.16	623989 78	
10300.00	91.45	277.79	7099 36	457.61	-3343 66	3374 83	0.00	595757.71	623890 74	
10400 00	91 45	277.79	7096.83	471 17	-3442 71	3474 80	0 00	595771.27	623791 69	
10500 00	91.45	277.79	7094.29	484 72	-3541.75	3574 77	0 00	595784 82	623692 65	
10600 00	91 45	277.79	7091 76	498 28	-3640.80	3674 73	0 00	595798 38	623593 60	
10700 00	91 45	277.79	7089 23	511 83	-3739 84	3774.70	0 00	595811 93	623494.56	
10800.00	91.45	277.79	7086 69	525 39	-3838.89	3874.67	0 00	595825.49	623395 51	
10900 00	91.45	277.79	7084 16	538.94	-3937.93	3974 64	0 00	595839 04	623296 47	
11000 00	91 45	277.79	7081 63	552.50	-4036 97	4074 61	0 00	595852.60	623197 43	
11100 00	91 45	277.79	7079 09	566.05	-4136.02	4174 57	0 00	595866.15	623098.38	
11200.00	91.45	277.79	7076 56	579 61	-4235.06	4274 54	0 00	595879 71	622999 34	
11300 00	91.45	277.79	7074 02	593 17	-4334.11	4374 51	0 00	595893 27	622900 29	
11400.00	91.45	277.79	7071 49	606 72	-4433.15	4474.48	0.00	595906.82	622801 25	
11500 00	91 45	277.79	7068.96	620 28	-4532.20	4574.45	0 00	595920.38	622702.20	
11600 00	91 45	277.79	7066 42	633 83	-4631 24	4674.41	0 00	595933.93	622603.16	
11700 00	91.45	277.79	7063.89	647.39	-4730.29	4774 38	0.00	595947 49	622504 11	
11800 00	91.45	277.79	7061 36	660.94	-4829 33	4874.35	0.00	595961 04	622405.07	
11853.55	91 45	277.79	7060 00	668.20	-4882 37	4927 88	0 00	595968 30	622352.03	PBHL



Weatherford

WFT Plan Report - X & Y's



Company:	Devon Energy	Date:	6/18/2012	Time:	10 03 10	Page:	3
Field:	Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well Turquoise PWU 27 #5H, Grid North				
Site:	Turquoise PWU 27 #5H	Vertical (TVD) Reference:	SITE 3357 0				
Well:	Turquoise PWU 27 #5H	Section (VS) Reference:	Well (0 00N,0 00E,277 79Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature		Db:	Sybase	

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			7060 00	668 20	-4882 37	595968 30	622352 03	32 38 17.111 N	104 4 12 546 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6597.23	6597.23	KOP
7511 75	7170 00	LP
11853 55	7060.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction



Weatherford Anticollision Report



Company: Devon Energy Date: 6/18/2012 Time: 11 04 00 Page: 1
Field: Eddy Co , NM (NAD 83)
Reference Site: Turquoise PWU 27 #5H Co-ordinate(NE) Reference: Well Turquoise PWU 27 #5H, Grd North
Reference Well: Turquoise PWU 27 #5H Vertical (TVD) Reference: SITE 3357.0
Reference Wellpath: 1 Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria
Interpolation Method: MD Interval: 100 00 ft
Depth Range: 0.00 to 11853.55 ft
Maximum Radius: 10000.00 ft

Reference: Plan Plan #1
Error Model: ISCWSA Ellipse
Scan Method: Closest Approach 3D
Error Surface: Ellipse

Plan: Plan #1 Date Composed: 6/18/2012
Principal: Yes Version: 1
Tied-to: From Surface

Summary

Site	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
Turquoise PWU 27 #1H	Turquoise PWU 27 #1H	V0	11853.55	7068.00	560.87	409.90	3.72	

Site: Turquoise PWU 27 #1H
Well: Turquoise PWU 27 #1H
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 Distance ft	Edge Distance ft	Separation Factor	Warning
0.00	0.00	8.00	8.00	0.00	0.01	271.26	107.41	-4892.12	4893.30			No Data
100.00	100.00	108.00	108.00	0.09	0.10	271.26	107.41	-4892.12	4893.30	4893.11	25314.69	
200.00	200.00	208.00	208.00	0.32	0.33	271.26	107.41	-4892.12	4893.30	4892.66	7612.11	
300.00	300.00	308.00	308.00	0.54	0.55	271.26	107.41	-4892.12	4893.30	4892.21	4479.55	
400.00	400.00	408.00	408.00	0.77	0.78	271.26	107.41	-4892.12	4893.30	4891.76	3173.56	
500.00	500.00	508.00	508.00	0.99	1.00	271.26	107.41	-4892.12	4893.30	4891.31	2457.18	
600.00	600.00	608.00	608.00	1.21	1.23	271.26	107.41	-4892.12	4893.30	4890.86	2004.66	
700.00	700.00	708.00	708.00	1.44	1.45	271.26	107.41	-4892.12	4893.30	4890.41	1692.90	
800.00	800.00	808.00	808.00	1.66	1.68	271.26	107.41	-4892.12	4893.30	4889.96	1465.05	
900.00	900.00	908.00	908.00	1.89	1.90	271.26	107.41	-4892.12	4893.30	4889.51	1291.26	
1000.00	1000.00	1008.00	1008.00	2.11	2.13	271.26	107.41	-4892.12	4893.30	4889.06	1154.33	
1100.00	1100.00	1108.00	1108.00	2.34	2.35	271.26	107.41	-4892.12	4893.30	4888.61	1043.65	
1200.00	1200.00	1208.00	1208.00	2.56	2.57	271.26	107.41	-4892.12	4893.30	4888.16	952.35	
1300.00	1300.00	1308.00	1308.00	2.79	2.80	271.26	107.41	-4892.12	4893.30	4887.71	875.73	
1400.00	1400.00	1408.00	1408.00	3.01	3.02	271.26	107.41	-4892.12	4893.30	4887.26	810.52	
1500.00	1500.00	1508.00	1508.00	3.24	3.25	271.26	107.41	-4892.12	4893.30	4886.81	754.35	
1600.00	1600.00	1608.00	1608.00	3.46	3.47	271.26	107.41	-4892.12	4893.30	4886.36	705.46	
1700.00	1700.00	1708.00	1708.00	3.69	3.70	271.26	107.41	-4892.12	4893.30	4885.91	662.53	
1800.00	1800.00	1808.00	1808.00	3.91	3.92	271.26	107.41	-4892.12	4893.30	4885.46	624.52	
1900.00	1900.00	1908.00	1908.00	4.14	4.15	271.26	107.41	-4892.12	4893.30	4885.01	590.63	
2000.00	2000.00	2008.00	2008.00	4.36	4.37	271.26	107.41	-4892.12	4893.30	4884.56	560.23	
2100.00	2100.00	2108.00	2108.00	4.59	4.60	271.26	107.41	-4892.12	4893.30	4884.12	532.81	
2200.00	2200.00	2208.00	2208.00	4.81	4.82	271.26	107.41	-4892.12	4893.30	4883.67	507.95	
2300.00	2300.00	2308.00	2308.00	5.04	5.05	271.26	107.41	-4892.12	4893.30	4883.22	485.30	
2400.00	2400.00	2408.00	2408.00	5.26	5.27	271.26	107.41	-4892.12	4893.30	4882.77	464.59	
2500.00	2500.00	2508.00	2508.00	5.49	5.50	271.26	107.41	-4892.12	4893.30	4882.32	445.57	
2600.00	2600.00	2608.00	2608.00	5.71	5.72	271.26	107.41	-4892.12	4893.30	4881.87	428.05	
2700.00	2700.00	2708.00	2708.00	5.93	5.95	271.26	107.41	-4892.12	4893.30	4881.42	411.85	
2800.00	2800.00	2808.00	2808.00	6.16	6.17	271.26	107.41	-4892.12	4893.30	4880.97	396.84	
2900.00	2900.00	2908.00	2908.00	6.38	6.40	271.26	107.41	-4892.12	4893.30	4880.52	382.88	
3000.00	3000.00	3008.00	3008.00	6.61	6.62	271.26	107.41	-4892.12	4893.30	4880.07	369.87	
3100.00	3100.00	3108.00	3108.00	6.83	6.85	271.26	107.41	-4892.12	4893.30	4879.62	357.72	
3200.00	3200.00	3208.00	3208.00	7.06	7.07	271.26	107.41	-4892.12	4893.30	4879.17	346.34	
3300.00	3300.00	12391.75	8080.00	7.28	125.33	334.20	590.63	-285.46	4816.88	4771.98	107.28	
3400.00	3400.00	12391.75	8080.00	7.51	125.33	334.20	590.63	-285.46	4717.83	4672.57	104.24	
3500.00	3500.00	12391.75	8080.00	7.73	125.33	334.20	590.63	-285.46	4618.82	4573.20	101.23	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Turquoise PWU 27 #5H
Reference Well: Turquoise PWU 27 #5H
Reference Wellpath: 1

Date: 6/18/2012 Time: 11 04 00 Page: 2
Co-ordinate(NE) Reference: Well Turquoise PWU 27 #5H, Grd North
Vertical (TVD) Reference: SITE 3357.0
Db: Sybase

Site: Turquoise PWU 27 #1H
Well: Turquoise PWU 27 #1H
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr	Edge	Separation	Warning
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	
3600.00	3600.00	12391.75	8080.00	7.96	125.33	334.20	590.63	-285.46	4519.86	4473.86	98.26	
3700.00	3700.00	12391.75	8080.00	8.18	125.33	334.20	590.63	-285.46	4420.94	4374.56	95.31	
3800.00	3800.00	12391.75	8080.00	8.41	125.33	334.20	590.63	-285.46	4322.07	4275.30	92.40	
3900.00	3900.00	12391.75	8080.00	8.63	125.33	334.20	590.63	-285.46	4223.26	4176.08	89.51	
4000.00	4000.00	12391.75	8080.00	8.86	125.33	334.20	590.63	-285.46	4124.50	4076.90	86.65	
4100.00	4100.00	12391.75	8080.00	9.08	125.33	334.20	590.63	-285.46	4025.81	3977.77	83.81	
4200.00	4200.00	12391.75	8080.00	9.31	125.33	334.20	590.63	-285.46	3927.18	3878.70	81.01	
4300.00	4300.00	12391.75	8080.00	9.53	125.33	334.20	590.63	-285.46	3828.62	3779.68	78.23	
4400.00	4400.00	12391.75	8080.00	9.76	125.33	334.20	590.63	-285.46	3730.14	3680.72	75.48	
4500.00	4500.00	12391.75	8080.00	9.98	125.33	334.20	590.63	-285.46	3631.74	3581.82	72.76	
4600.00	4600.00	12391.75	8080.00	10.21	125.33	334.20	590.63	-285.46	3533.43	3482.99	70.06	
4700.00	4700.00	12391.75	8080.00	10.43	125.33	334.20	590.63	-285.46	3435.22	3384.24	67.39	
4800.00	4800.00	12391.75	8080.00	10.66	125.33	334.20	590.63	-285.46	3337.11	3285.57	64.74	
4900.00	4900.00	12391.75	8080.00	10.88	125.33	334.20	590.63	-285.46	3239.12	3186.98	62.12	
5000.00	5000.00	12391.75	8080.00	11.10	125.33	334.20	590.63	-285.46	3141.26	3088.49	59.53	
5100.00	5100.00	12391.75	8080.00	11.33	125.33	334.20	590.63	-285.46	3043.54	2990.11	56.97	
5200.00	5200.00	12391.75	8080.00	11.55	125.33	334.20	590.63	-285.46	2945.97	2891.84	54.43	
5300.00	5300.00	12391.75	8080.00	11.78	125.33	334.20	590.63	-285.46	2848.56	2793.69	51.92	
5400.00	5400.00	12391.75	8080.00	12.00	125.33	334.20	590.63	-285.46	2751.35	2695.69	49.43	
5500.00	5500.00	12391.75	8080.00	12.23	125.33	334.20	590.63	-285.46	2654.34	2597.83	46.97	
5600.00	5600.00	12391.75	8080.00	12.45	125.33	334.20	590.63	-285.46	2557.56	2500.15	44.55	
5700.00	5700.00	12391.75	8080.00	12.68	125.33	334.20	590.63	-285.46	2461.04	2402.65	42.15	
5800.00	5800.00	12391.75	8080.00	12.90	125.33	334.20	590.63	-285.46	2364.81	2305.37	39.79	
5900.00	5900.00	12391.75	8080.00	13.13	125.33	334.20	590.63	-285.46	2268.90	2208.32	37.45	
6000.00	6000.00	12391.75	8080.00	13.35	125.33	334.20	590.63	-285.46	2173.36	2111.54	35.15	
6100.00	6100.00	12391.75	8080.00	13.58	125.33	334.20	590.63	-285.46	2078.25	2015.07	32.89	
6200.00	6200.00	12391.75	8080.00	13.80	125.33	334.20	590.63	-285.46	1983.61	1918.94	30.67	
6300.00	6300.00	12391.75	8080.00	14.03	125.33	334.20	590.63	-285.46	1889.53	1823.22	28.50	
6400.00	6400.00	12391.75	8080.00	14.25	125.33	334.20	590.63	-285.46	1796.08	1727.96	26.37	
6500.00	6500.00	12391.75	8080.00	14.48	125.33	334.20	590.63	-285.46	1703.38	1633.25	24.29	
6600.00	6600.00	12391.75	8080.00	14.70	125.33	56.93	590.63	-285.46	1611.56	1539.17	22.26	
6700.00	6699.45	12391.75	8080.00	14.93	125.33	79.31	590.63	-285.46	1519.09	1444.32	20.32	
6800.00	6795.79	12391.75	8080.00	15.16	125.33	103.89	590.63	-285.46	1426.37	1349.25	18.50	
6900.00	6886.10	12391.75	8080.00	15.42	125.33	122.79	590.63	-285.46	1336.44	1257.44	16.92	
7000.00	6967.64	12391.75	8080.00	15.78	125.33	134.70	590.63	-285.46	1252.92	1172.69	15.62	
7100.00	7037.92	12394.13	8080.04	16.30	125.39	141.88	590.88	-283.09	1179.97	1099.04	14.58	
7200.00	7094.81	12315.47	8078.59	17.09	123.27	145.68	582.67	-361.31	1119.46	1039.48	14.00	
7300.00	7136.58	12228.15	8076.99	18.20	120.91	148.55	573.57	-448.14	1071.06	992.69	13.67	
7400.00	7161.96	12134.82	8075.27	19.63	118.40	150.83	563.83	-540.94	1036.16	959.97	13.60	
7500.00	7170.18	12038.32	8073.49	21.32	115.79	152.71	553.77	-636.90	1016.01	942.40	13.80	
7600.00	7167.77	11941.20	8071.70	23.21	113.18	153.96	543.64	-733.48	1005.54	934.49	14.15	
7700.00	7165.23	11844.08	8069.91	25.26	110.56	155.18	533.50	-830.05	995.63	927.07	14.52	
7800.00	7162.70	11746.95	8068.12	27.44	107.94	156.42	523.37	-926.62	986.20	920.07	14.91	
7900.00	7160.17	11649.83	8066.33	29.71	105.33	157.68	513.24	-1023.20	977.25	913.52	15.33	
8000.00	7157.63	11552.71	8064.54	32.07	102.72	158.96	503.11	-1119.77	968.82	907.43	15.78	
8100.00	7155.10	11455.59	8062.75	34.48	100.11	160.27	492.98	-1216.34	960.89	901.83	16.27	
8200.00	7152.57	11358.47	8060.96	36.94	97.50	161.59	482.85	-1312.92	953.50	896.72	16.79	
8300.00	7150.03	11261.35	8059.17	39.45	94.90	162.93	472.72	-1409.49	946.65	892.10	17.35	
8400.00	7147.50	11164.23	8057.38	41.98	92.29	164.29	462.59	-1506.07	940.36	887.98	17.96	
8500.00	7144.97	11067.11	8055.59	44.55	89.69	165.67	452.46	-1602.64	934.62	884.36	18.59	
8600.00	7142.43	10969.99	8053.80	47.14	87.09	167.06	442.33	-1699.21	929.47	881.22	19.26	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co , NM (NAD 83)
Reference Site: Turquoise PWU 27 #5H
Reference Well: Turquoise PWU 27 #5H
Reference Wellpath: 1

Date: 6/18/2012 Time: 11 04 00 Page: 3
Co-ordinate(NE) Reference: Well Turquoise PWU 27 #5H, Grd North
Vertical (TVD) Reference: SITE 3357 0
Db: Sybase

Site: Turquoise PWU 27 #1H
Well: Turquoise PWU 27 #1H
Wellpath: 1 V0

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft				
8700.00	7139.90	10872.87	8052.01	49.74	84.50	168.47	432.20	-1795.79	924.90	878.55	19.95	
8800.00	7137.36	10775.75	8050.22	52.36	81.90	169.89	422.07	-1892.36	920.92	876.34	20.66	
8900.00	7134.83	10678.63	8048.43	55.00	79.32	171.32	411.94	-1988.94	917.55	874.58	21.35	
9000.00	7132.30	10581.51	8046.64	57.65	76.73	172.76	401.81	-2085.51	914.78	873.23	22.01	
9100.00	7129.76	10484.39	8044.85	60.31	74.15	174.20	391.68	-2182.08	912.63	872.28	22.62	
9200.00	7127.23	10387.27	8043.06	62.98	71.57	175.65	381.55	-2278.66	911.09	871.70	23.13	
9300.00	7124.70	10290.15	8041.27	65.65	69.00	177.11	371.42	-2375.23	910.18	871.47	23.51	
9400.00	7122.16	10193.03	8039.48	68.34	66.44	178.56	361.29	-2471.81	909.89	871.58	23.75	
9500.00	7119.63	10095.91	8037.69	71.03	63.88	180.02	351.16	-2568.38	910.23	872.01	23.82	
9600.00	7117.10	9998.79	8035.90	73.72	61.33	181.48	341.03	-2664.95	911.18	872.76	23.72	
9700.00	7114.56	9901.67	8034.11	76.42	58.79	182.93	330.90	-2761.53	912.76	873.84	23.45	
9800.00	7112.03	9804.55	8032.32	79.13	56.26	184.37	320.77	-2858.10	914.96	875.24	23.04	
9900.00	7109.50	9707.43	8030.53	81.84	53.74	185.81	310.64	-2954.67	917.77	877.00	22.51	
10000.00	7106.96	9610.31	8028.74	84.55	51.23	187.24	300.51	-3051.25	921.18	879.13	21.91	
10100.00	7104.43	9513.19	8026.95	87.27	48.73	188.66	290.38	-3147.82	925.20	881.65	21.24	
10200.00	7101.89	9416.07	8025.16	89.99	46.26	190.06	280.25	-3244.40	929.81	884.58	20.56	
10300.00	7099.36	9318.95	8023.37	92.71	43.80	191.45	270.12	-3340.97	935.01	887.93	19.86	
10400.00	7096.83	9221.83	8021.59	95.43	41.36	192.83	259.99	-3437.54	940.78	891.73	19.18	
10500.00	7094.29	9124.71	8019.80	98.16	38.96	194.19	249.86	-3534.12	947.12	895.98	18.52	
10600.00	7091.76	9027.59	8018.01	100.89	36.58	195.53	239.73	-3630.69	954.00	900.69	17.90	
10700.00	7089.23	8930.47	8016.22	103.62	34.25	196.85	229.60	-3727.27	961.43	905.87	17.30	
10800.00	7086.69	8833.35	8014.43	106.36	31.97	198.16	219.47	-3823.84	969.39	911.50	16.75	
10900.00	7084.16	8736.23	8012.64	109.09	29.74	199.44	209.34	-3920.41	977.87	917.59	16.22	
11000.00	7081.63	8639.11	8010.85	111.83	27.51	200.72	199.21	-4016.98	986.34	923.86	15.70	
11100.00	7079.09	8542.00	8009.06	114.56	25.28	202.00	189.08	-4113.55	994.81	930.33	15.18	
11200.00	7076.56	8444.89	8007.27	117.30	23.05	203.28	178.95	-4210.12	1003.28	936.80	14.66	
11300.00	7074.02	8347.78	8005.48	120.04	20.82	204.56	168.82	-4306.69	1011.75	943.27	14.14	
11400.00	7071.49	8250.67	8003.69	122.78	18.59	205.84	158.69	-4403.26	1020.22	949.74	13.62	
11500.00	7068.96	8153.56	8001.90	125.53	16.36	207.12	148.56	-4499.83	1028.69	956.21	13.10	
11600.00	7066.42	8056.45	7999.11	128.27	14.13	208.40	138.43	-4596.40	1037.16	962.68	12.58	
11700.00	7063.89	7959.34	7997.32	131.02	11.90	209.68	128.30	-4692.97	1045.63	969.15	12.06	
11800.00	7061.36	7862.23	7995.53	133.76	9.67	210.96	118.17	-4789.54	1054.10	975.62	11.54	
11853.55	7060.00	7808.00	7996.00	135.23	7.44	212.24	108.04	-4886.11	1062.57	982.09	11.02	

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

GeoDec v5.03

Report Date: June 18, 2012
Job Number: _____
Customer: Devon Energy
Well Name: Turquoise PWU 27 #5H
API Number: _____
Rig Name: _____
Location: Eddy Co., NM
Block: _____
Engineer: RWJ

US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 595300.100 USFT	Latitude 32.6362189 DEG
East/West 627234.400 USFT	Longitude -104.0542924 DEG
Grid Convergence: .15°	
Total Correction: +7.53°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.63622° N	32° 38 min 10.388 sec
Longitude =	104.05429° W	104° 3 min 15.453 sec

Magnetic Declination =	7.68°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6667
Local Field Strength =	48699 nT	Magnetic Vector X = 23801 nT
Magnetic Dip =	60.45°	Magnetic Vector Y = 3208 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42366 nT
Spud Date =	Oct 15, 2012	Magnetic Vector H = 24016 nT

Signed: _____

Date: _____