

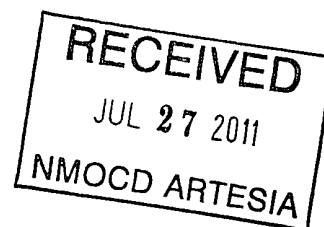


An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

30-015-38401

YATES PETROLEUM
GEM DANDY BCG STATE #3H
EDDY COUNTY, NEW MEXICO



PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
(432) 681-6000

Pathfinder

6213 W Interstate 20
Midland, Texas 79706
Tel 432 687 1641
Fax 432 687 1544

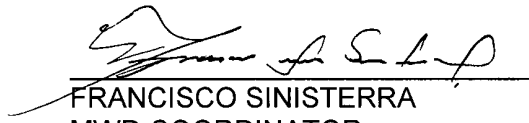


DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) PRITHWISH DAS
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 04-05-11 TO 04-14-11
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
GEM DANDY BCG STATE #3H
EDDY COUNTY, NM
RIG: SILVER OAK #10
9. SURVEY CERTIFIED FROM: 5560 TO 10440 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 4437.57 FEET ON A BEARING OF 102.69 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 10520 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 04/05/2011
Date Completed: 04/14/2011

YATES PETROLEUM CORPORATION
GEM DANDY "BCG" STATE #3H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK # 10
PathFinder Office Supervisor: FRANSCISCO SINISTERRA
PathFinder Field Engineers:P.DAS
M.ALIYEV

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.52.56.1950 N LON:104.15.21.1336 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 565117.3000 Y: 684714.6900
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.93° EAST TO GRID
Vertical Section Plane: 102.25
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3424.00' Ground To MSL

Measured Depth	10520.00	(feet)
Inclination	88.72	(deg)
Azimuth	97.08	(deg)
True Vertical Depth	6196.04	(feet)
Vertical Section	4437.44	(feet)
Survey X cord	569446.54	(feet)
Survey Y cord	683740.18	(feet)
Survey Lat	32.87958830 N	(deg)
Survey Lon	104.24177065 W	(deg)
Rectangular Corr. N/S	974.51 S	(feet)
Rectangular Corr. E/W	4329.24 E	(feet)
Closure Distance	4437.57	(feet)
Direction of Closure	102.69	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
 GEM DANDY "BCG" STATE #3H
 EDDY COUNTY, NEW MEXICO
 Rig: SILVER OAK # 10
 PathFinder Office Supervisor: FRANCISCO SINISTERRA
 PathFinder Field Engineers: P.DAS
 M.ALIYEV

Survey Horiz. Reference: WELLHEAD
 Ref Coordinates: LAT: 32.52.56.1950 N LON: 104.15.21.1336 W
 GRID Reference: NAD83 new mexico east Transverse Mercator
 Ref GRID Coord: X: 565117.3000 Y: 684714.6900
 North Aligned To: GRID NORTH
 Total Magnetic Correction: 7.93° EAST TO GRID
 Vertical Section Plane: 102.25
 Survey Vert. Reference: 18.00' Kelly Bushing To Ground
 Altitude: 3424.00' Ground To MSL

Survey Calculations by RX5 V6.03D using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIED INTO MS ENERGY MULTISHOT SURVEY @ 5448'MD.										
5448.00	0.25	138.10	5446.66	0.00	-89.60	53.80 N	80.01 W	96.42@	303.92	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
5560.00	0.62	116.95	5558.66	112.00	-88.82	53.34 N	79.31 W	95.58@	303.93	0.35
5655.00	3.17	121.97	5653.60	95.00	-85.85	51.72 N	76.62 W	92.44@	304.02	2.69
5687.00	7.83	122.67	5685.44	32.00	-82.97	50.07 N	74.03 W	89.38@	304.07	14.56
5719.00	13.01	122.17	5716.90	32.00	-77.54	46.98 N	69.15 W	83.59@	304.19	16.19
5750.00	18.29	121.56	5746.74	31.00	-69.66	42.57 N	62.04 W	75.24@	304.46	17.04
5782.00	23.30	121.41	5776.65	32.00	-58.94	36.64 N	52.36 W	63.90@	304.99	15.66
5813.00	26.82	120.51	5804.73	31.00	-46.50	29.89 N	41.09 W	50.82@	306.03	11.42
5845.00	29.90	119.55	5832.88	32.00	-32.03	22.29 N	27.93 W	35.74@	308.59	9.73
5877.00	32.98	119.48	5860.18	32.00	-16.09	14.07 N	13.41 W	19.44@	316.38	9.63
5908.00	37.28	121.14	5885.53	31.00	0.86	5.06 N	1.98 E	5.43@	21.36	14.21
5940.00	41.24	123.23	5910.30	32.00	19.89	5.74 S	19.10 E	19.95@	106.72	13.05
5971.00	44.58	126.59	5933.01	31.00	39.35	17.83 S	36.39 E	40.52@	116.10	13.06
6003.00	46.87	130.60	5955.35	32.00	59.86	32.13 S	54.28 E	63.08@	120.62	11.47
6035.00	49.15	134.56	5976.76	32.00	80.38	48.22 S	71.78 E	86.47@	123.89	11.63
6066.00	53.90	135.85	5996.04	31.00	100.73	65.45 S	88.87 E	110.36@	126.37	15.66
6102.00	59.53	135.54	6015.79	36.00	125.83	86.97 S	109.88 E	140.13@	128.36	15.66
6133.00	64.63	134.74	6030.30	31.00	148.83	106.38 S	129.20 E	167.36@	129.47	16.61
6165.00	69.64	133.87	6042.73	32.00	173.81	126.96 S	150.29 E	196.74@	130.19	15.86
6195.00	73.60	133.73	6052.19	30.00	198.07	146.66 S	170.84 E	225.16@	130.65	13.21
6226.00	77.29	133.35	6059.98	31.00	223.70	167.33 S	192.59 E	255.12@	130.99	11.96
6258.00	80.11	133.00	6066.25	32.00	250.62	188.80 S	215.47 E	286.48@	131.23	8.88
6289.00	82.48	131.39	6070.94	31.00	277.17	209.38 S	238.17 E	317.12@	131.32	9.21
6320.00	84.68	130.21	6074.41	31.00	304.23	229.50 S	261.49 E	347.92@	131.27	8.04

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
GEM DANDY "BCG" STATE #3H
EDDY COUNTY, NEW MEXICO
RIG:SILVER OAK # 10

Page 02/03

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
6351.00	87.76	128.01	6076.45	31.00	331.82	249.01 S	285.48 E	378.82@	131.10	12.20
6377.00	88.72	128.05	6077.25	26.00	355.22	265.02 S	305.95 E	404.78@	130.90	3.70
6470.00	89.08	127.69	6079.04	93.00	439.06	322.10 S	379.36 E	497.65@	130.33	0.55
6563.00	88.02	125.62	6081.39	93.00	523.72	377.60 S	453.93 E	590.46@	129.75	2.50
6657.00	88.11	123.26	6084.56	94.00	610.70	430.73 S	531.41 E	684.05@	129.03	2.51
6750.00	88.90	120.35	6086.99	93.00	698.30	479.72 S	610.41 E	776.35@	128.16	3.24
6844.00	89.08	116.33	6088.65	94.00	788.58	524.32 S	693.11 E	869.09@	127.11	4.28
6936.00	88.72	112.49	6090.41	92.00	878.48	562.33 S	776.86 E	959.02@	125.90	4.19
7029.00	89.08	108.54	6092.20	93.00	970.48	594.91 S	863.93 E	1048.94@	124.55	4.26
7123.00	88.99	104.75	6093.78	94.00	1064.17	621.83 S	953.96 E	1138.73@	123.10	4.03
7216.00	88.55	100.87	6095.78	93.00	1157.13	642.44 S	1044.60 E	1226.35@	121.59	4.20
7309.00	88.46	99.20	6098.21	93.00	1250.03	658.64 S	1136.15 E	1313.25@	120.10	1.80
7402.00	89.52	97.77	6099.85	93.00	1342.81	672.36 S	1228.11 E	1400.11@	118.70	1.91
7496.00	89.16	96.02	6100.93	94.00	1436.39	683.64 S	1321.42 E	1487.79@	117.35	1.90
7589.00	89.16	96.03	6102.29	93.00	1528.83	693.40 S	1413.90 E	1574.77@	116.12	0.01
7682.00	89.60	95.01	6103.30	93.00	1621.18	702.34 S	1506.46 E	1662.14@	115.00	1.19
7775.00	88.02	95.57	6105.23	93.00	1713.47	710.92 S	1599.04 E	1749.95@	113.97	1.80
7869.00	87.76	95.59	6108.69	94.00	1806.77	720.05 S	1692.53 E	1839.33@	113.05	0.28
7962.00	88.02	94.75	6112.12	93.00	1899.00	728.43 S	1785.09 E	1927.99@	112.20	0.94
8056.00	87.67	94.53	6115.65	94.00	1992.11	736.02 S	1878.72 E	2017.75@	111.39	0.44
8149.00	87.14	94.69	6119.86	93.00	2084.19	743.49 S	1971.32 E	2106.86@	110.66	0.60
8242.00	86.88	94.61	6124.71	93.00	2176.24	751.02 S	2063.89 E	2196.28@	110.00	0.29
8329.00	86.88	93.57	6129.45	87.00	2262.23	757.22 S	2150.54 E	2279.95@	109.40	1.19
8422.00	86.26	94.20	6135.01	93.00	2354.08	763.51 S	2243.15 E	2369.53@	108.80	0.95
8515.00	85.65	95.41	6141.57	93.00	2446.06	771.28 S	2335.59 E	2459.65@	108.27	1.45
8608.00	86.00	95.64	6148.34	93.00	2538.18	780.21 S	2427.92 E	2550.20@	107.81	0.45
8701.00	87.58	95.55	6153.55	93.00	2630.40	789.26 S	2520.33 E	2641.02@	107.39	1.70
8794.00	88.37	95.45	6156.84	93.00	2722.70	798.17 S	2612.84 E	2732.03@	106.99	0.86

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
GEM DANDY "BCG" STATE #3H
EDDY COUNTY, NEW MEXICO
RIG:SILVER OAK # 10

Page 03/03

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
8887.00	88.72	95.31	6159.20	93.00	2815.00	806.88 S	2705.40 E	2823.16@	106.61	0.41
8980.00	88.64	95.53	6161.34	93.00	2907.32	815.67 S	2797.96 E	2914.43@	106.25	0.25
9074.00	88.72	96.03	6163.51	94.00	3000.69	825.13 S	2891.46 E	3006.88@	105.93	0.54
9167.00	88.64	95.99	6165.65	93.00	3093.12	834.86 S	2983.92 E	3098.51@	105.63	0.10
9260.00	88.55	96.10	6167.93	93.00	3185.55	844.66 S	3076.37 E	3190.22@	105.35	0.15
9354.00	88.81	95.11	6170.09	94.00	3278.89	853.83 S	3169.90 E	3282.88@	105.08	1.09
9447.00	88.37	95.68	6172.38	93.00	3371.20	862.57 S	3262.46 E	3374.56@	104.81	0.77
9540.00	88.29	95.17	6175.09	93.00	3463.50	871.36 S	3355.00 E	3466.31@	104.56	0.56
9633.00	88.02	95.55	6178.09	93.00	3555.78	880.05 S	3447.55 E	3558.10@	104.32	0.50
9726.00	88.02	94.75	6181.30	93.00	3648.01	888.39 S	3540.12 E	3649.88@	104.09	0.86
9819.00	88.90	95.49	6183.80	93.00	3740.25	896.69 S	3632.71 E	3741.74@	103.87	1.24
9911.00	89.08	95.66	6185.42	92.00	3831.62	905.62 S	3724.26 E	3832.79@	103.67	0.27
10004.00	88.99	96.23	6186.99	93.00	3924.04	915.25 S	3816.75 E	3924.95@	103.48	0.62
10097.00	89.08	96.49	6188.55	93.00	4016.54	925.55 S	3909.16 E	4017.24@	103.32	0.30
10190.00	89.16	96.15	6189.98	93.00	4109.03	935.79 S	4001.58 E	4109.55@	103.16	0.38
10284.00	89.08	96.48	6191.43	94.00	4202.51	946.13 S	4095.00 E	4202.88@	103.01	0.36
10377.00	88.99	96.92	6192.99	93.00	4295.06	956.98 S	4187.36 E	4295.32@	102.87	0.48
10440.00	88.72	97.08	6194.25	63.00	4357.79	964.65 S	4249.87 E	4357.98@	102.79	0.50
STRAIGHT-LINE PROJECTION TO BIT @ 10520' MD.										
10520.00	88.72	97.08	6196.04	80.00	4437.44	974.51 S	4329.24 E	4437.57@	102.69	0.00



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM		
LEASE / WELL No.:	GEM DANDY "BCG" STATE	3H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY COUNTY	NEW MEXICO	USA
RIG:	SILVER OAK #10		
API WELL No:	30-015-38401		
JOB No:	700002075-WT-WT		
P.O. / AFE No.	11-005-0		
DIRECTIONAL COMPANY:	PES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):					
On Wall Plat:	7.93	LWD Calculated:	7.932	Agreed Upon:	7.93
X =	565117.300000	Feet	Y =	684714.690000	Feet
SITE LATITUDE:	32.882276	SITE LONGITUDE:	104.25587		
GRID SYSTEM:	TRUE ☐	UTM ☐	LAMBERT ☒	ZONE:	
PROPOSED DRIFT DIRECTION:	88.94				
KELLY BUSHING ELEVATION:	18				
ALTITUDE:	3424	Feet	WATER DEPTH:	Feet	

TIE-IN SURVEY

MEASURED DEPTH:	5488
DRIFT ANGLE:	0.25
DRIFT DIRECTION:	138.1
TRUE VERTICAL DEPTH:	5446.66
VERTICAL SECTION:	-89.61
RECTANGULAR COORDINATE (N / S) :	53.80 N
RECTANGULAR COORDINATE (E / W) :	80.01 W
CLOSURE DISTANCE / DIRECTION:	
SURVEY CALCULATION METHOD:	AA ☐ MC ☒ RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	MS ENERGY SERVICES
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO

WELL PLAN

KICKOFF DEPTH:	5650	TOTAL DEPTH:	10461.68
KICKOFF ANGLE:	0.62	MAX ANGLE:	88.94

PES Engineers:

P.DAS

Richard Stoll

**Signature of both field engineers required if applicable

Directional Driller:

Richard Stoll

DATE: 04/05/11

TIE IN

MS ENERGY SERVICES
ODESSA, TEXAS

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

* **YATES PETROLEUM** *

JOB NUMBER: SVCO-110351

WELL NAME: GEM DANDY BCG STATE #3H

LOCATION: EDDY COUNTY, NEW MEXICO

SURVEY DATE: APRIL 05, 2011

SURVEY ENGINEER: S. SMITH

MAGNETIC DECLINATION: 07.93 GRID NORTH

GYRO REFERENCE BEARING: GRID NORTH

VERTICAL SECTION CALCULATED IN A
PROPOSAL DIRECTION OF: 102.25
SURF. ELEVATION: 18

***** DEPTH MEASURED IN FEET *****

***** THIS DIRECTIONAL SURVEY REPORT IS *****
***** CORRECT TO THE BEST OF MY KNOWLEDGE *****
COMMENTS: SILVER OAK 10 . * AND IS SUPPORTED BY ACTUAL FIELD DATA! *
RKB 18' ** **
TBUSSELL@YATESPETROLEUM.COM** **
MIKEL@YATESPETROLEUM.COM ** ***** **
** COMPANY REPRESENTATIVE **

WELL NAME: GEM DANDY BCG STATE #3H

TIE IN

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	L/R PROP.	INCL	BEARING AZIMUTH	COORDINATES LATITUDE DEPARTURE	D-LEG /100	D-LEG /CL	STATION DISP.	DISPLACEMENT DIRECTION
0.0	0.00	0.00	0.000	00.00	000.00	0.00 N 0.00 E	0.00		0.00	AT 000.00
200.0	200.00	-0.72	-0.495	00.50	316.78	0.64 N 0.60 W	0.25	0.50	0.87	AT 316.78
400.0	399.99	-2.64	-1.513	00.75	305.85	2.04 N 2.26 W	0.14	0.28	3.04	AT 312.10
600.0	599.98	-4.18	-2.304	00.25	319.92	3.14 N 3.60 W	0.26	0.51	4.77	AT 311.10
800.0	799.98	-4.82	-2.894	00.25	329.99	3.85 N 4.10 W	0.02	0.04	5.62	AT 313.22
1000.0	999.97	-5.04	-3.647	00.25	022.06	4.63 N 4.15 W	0.11	0.22	6.22	AT 318.14
1200.0	1199.97	-5.39	-5.313	00.75	353.13	6.34 N 4.14 W	0.27	0.54	7.57	AT 326.82
1400.0	1399.95	-6.12	-7.370	00.50	352.20	8.50 N 4.42 W	0.13	0.25	9.58	AT 332.53
1600.0	1599.95	-6.83	-8.339	00.25	302.27	9.60 N 4.91 W	0.19	0.39	10.78	AT 332.92
1800.0	1799.94	-8.75	-9.363	01.00	312.34	11.01 N 6.57 W	0.38	0.76	12.82	AT 329.18
2000.0	1999.91	-11.45	-11.518	01.00	329.41	13.68 N 8.74 W	0.15	0.30	16.24	AT 327.42
2200.0	2199.88	-14.32	-13.256	01.00	297.48	15.99 N 11.18 W	0.28	0.55	19.51	AT 325.04
2400.0	2399.84	-18.13	-14.192	01.25	294.90	17.72 N 14.71 W	0.13	0.26	23.03	AT 320.30
2600.0	2599.78	-22.77	-15.423	01.50	298.96	19.90 N 18.98 W	0.13	0.27	27.50	AT 316.36
2800.0	2799.70	-28.20	-17.057	01.75	299.03	22.65 N 23.94 W	0.13	0.25	32.96	AT 313.42
3000.0	2999.59	-34.42	-19.066	02.00	301.10	25.94 N 29.60 W	0.13	0.26	39.35	AT 311.23
3200.0	3199.47	-40.78	-21.882	02.00	311.17	30.04 N 35.21 W	0.18	0.35	46.28	AT 310.47
3400.0	3399.34	-47.61	-24.650	02.25	298.23	34.19 N 41.30 W	0.27	0.54	53.61	AT 309.62
3600.0	3599.17	-55.27	-27.715	02.50	309.30	38.81 N 48.13 W	0.26	0.52	61.83	AT 308.88
3800.0	3798.99	-62.65	-31.488	02.25	309.37	44.06 N 54.54 W	0.13	0.25	70.12	AT 308.93
4000.0	3998.87	-68.99	-34.382	01.75	303.45	48.24 N 60.13 W	0.27	0.54	77.08	AT 308.74
4200.0	4198.79	-74.28	-36.436	01.50	303.53	51.37 N 64.86 W	0.13	0.25	82.73	AT 308.38
4400.0	4398.74	-78.46	-37.488	01.00	285.60	53.28 N 68.72 W	0.31	0.63	86.96	AT 307.79
4600.0	4598.71	-81.83	-38.228	01.00	303.67	54.72 N 71.85 W	0.16	0.31	90.32	AT 307.29
4800.0	4798.69	-84.72	-38.559	00.75	268.74	55.66 N 74.61 W	0.29	0.58	93.09	AT 306.72
5000.0	4998.68	-86.78	-37.880	00.50	256.89	55.43 N 76.77 W	0.14	0.28	94.69	AT 305.83
5200.0	5198.67	-88.70	-36.846	00.75	251.96	54.83 N 78.87 W	0.13	0.26	96.05	AT 304.81
5400.0	5398.66	-89.72	-35.765	00.25	177.03	53.99 N 80.09 W	0.36	0.73	96.59	AT 303.98
5448.0	5446.66	-89.61	-35.602	00.25	138.10	53.80 N 80.01 W	0.35	0.17	96.42	AT 303.92

```

*****
*                                     *
*                                     *
*          THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF          *
*                                     *
*          *****
* 5448.00 FEET EQUALS          96.42          FEET AT          303.92          *
*          *****
*****

```



A Schlumberger Company

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
GEM DANDY "BCG" STATE #3H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK 10

Thu Mar 31 09:36:18 2011

Coordinates

Latitude: 32.882276 N (32 deg. 52 min. 56.1950 sec.)
Longitude: 104.255870 W (-104 deg. 15 min. 21.1336 sec.)
Elevation: 3442.00 feet.
Calculation Date: Mar/31/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.6810 degrees
Total Magnetic Field: 0.48956 gauss
Magnetic Declination: 7.976178 degrees
Horizontal Intensity: 0.239725 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.976178 Degs

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 565117.3000 feet
Y: 684714.6900 feet
True to Grid: (convergence) -0.042056 degrees
Magnetic to Grid: 7.934122 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.934122 Degs.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
GEM DANDY "BCG" STATE #3H
EDDY COUNTY
Rig: SILVER OAK #10

Tue Apr 05 01:08:53 2011

Coordinates

Latitude: 32.882276 N (32 deg. 52 min. 56.1950 sec.)
Longitude: 104.255870 W (-104 deg. 15 min. 21.1336 sec.)
Elevation: 3442.00 feet.
Calculation Date: Apr/05/2011

ON LOCATION

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.6806 degrees
Total Magnetic Field: 0.48955 gauss
Magnetic Declination: 7.974511 degrees
Horizontal Intensity: 0.239720 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.974511 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 565117.3000 feet
Y: 684714.6900 feet
True to Grid: (convergence) -0.042056 degrees
Magnetic to Grid: 7.932455 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.932455 Degr.