

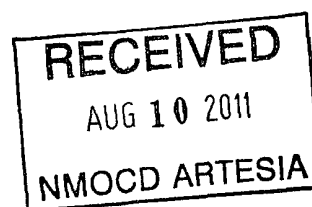


An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

30-015-36220

YATES PETROLEUM
SHOCKER 32 STATE #3H
EDDY COUNTY, NEW MEXICO



PREPARED BY: FRANCISCO SINISTERRA

Pathfinder

6213 W Interstate 20
Midland, Texas 79706
Tel 432 687 1647
Fax 432 687 1544

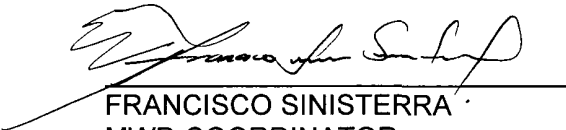


DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JACOB NEWHOUSE
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 04-03-11 TO 04-22-11
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
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
RIG: PATTERSON #75
9. SURVEY CERTIFIED FROM: 6137 TO 11383 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4607.53 FEET ON A BEARING OF 180.62 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11450 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: 04/03/2011
Date Completed: 04/22/2011

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
Rig:PATTERSON RIG 75
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:JACOB NEWHOUSE
SEAN MOORE

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.533.0524 N LON:103.59.54.3972 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 603709.9000 Y: 397541.4000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.62° EAST TO GRID
Vertical Section Plane: 180.67
Survey Vert. Reference: 23.00' Kelly Bushing To Ground
Altitude:2983.00' Ground To MSL

Measured Depth	11450.00	(feet)
Inclination	90.13	(deg)
Azimuth	179.36	(deg)
True Vertical Depth	7064.68	(feet)
Vertical Section	4607.53	(feet)
Survey X cord	603660.23	(feet)
Survey Y cord	392934.28	(feet)
Survey Lat	32.07984998 N	(deg)
Survey Lon	103.99865023 W	(deg)
Rectangular Corr. N/S	4607.26 S	(feet)
Rectangular Corr. E/W	49.55 W	(feet)
Closure Distance	4607.53	(feet)
Direction of Closure	180.62	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION

SHOCKER 32 STATE #3H

EDDY COUNTY, NM

Rig:PATTERSON RIG 75

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: JACOB NEWHOUSE

SEAN MOORE

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.5.33.0524 N LON:103.59.54.3972 W

GRID Reference:NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 603709.9000 Y: 397541.4000

North Aligned To:GRID NORTH

Total Magnetic Correction: 7.62° EAST TO GRID

Vertical Section Plane: 180.67

Survey Vert. Reference: 23.00' Kelly Bushing To Ground

Altitude:2983.00' Ground To MSL

Survey Calculations by RX5 V6.03E 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)
THE FOLLOWING ARE MS GYROSCOPIC SURVEYS.										
200.00	1.00	215.25	199.99	0.00	1.44	1.43 S	1.01 W	1.75@	215.18	0.00
400.00	1.25	186.31	399.95	200.00	5.05	5.02 S	2.25 W	5.50@	204.17	0.31
600.00	0.75	178.37	599.92	200.00	8.53	8.50 S	2.46 W	8.85@	196.12	0.26
800.00	0.75	185.42	799.90	200.00	11.14	11.11 S	2.54 W	11.40@	192.89	0.05
1000.00	1.00	182.48	999.88	200.00	14.19	14.16 S	2.74 W	14.42@	190.96	0.13
1200.00	0.75	230.53	1199.86	200.00	16.78	16.73 S	3.83 W	17.17@	192.89	0.37
1400.00	0.75	202.59	1399.84	200.00	18.83	18.77 S	5.34 W	19.52@	195.88	0.18
1600.00	0.50	234.65	1599.83	200.00	20.56	20.49 S	6.56 W	21.51@	197.75	0.21
1800.00	0.25	298.71	1799.83	200.00	20.87	20.78 S	7.65 W	22.15@	200.21	0.23
2000.00	0.50	116.76	1999.83	200.00	21.05	20.97 S	7.25 W	22.18@	199.09	0.38
2200.00	1.50	90.82	2199.79	200.00	21.44	21.40 S	3.86 W	21.74@	190.22	0.54
2400.00	2.00	92.87	2399.70	200.00	21.58	21.61 S	2.25 E	21.72@	174.07	0.25
2600.00	1.50	97.93	2599.61	200.00	22.05	22.14 S	8.32 E	23.66@	159.40	0.26
2800.00	0.75	129.99	2799.57	200.00	23.21	23.35 S	11.92 E	26.21@	152.95	0.48
3000.00	0.25	225.05	2999.56	200.00	24.35	24.50 S	12.61 E	27.55@	152.75	0.41
3200.00	0.50	195.10	3199.56	200.00	25.50	25.65 S	12.08 E	28.35@	154.78	0.16
3400.00	0.25	191.22	3399.55	200.00	26.78	26.92 S	11.77 E	29.38@	156.39	0.13
3600.00	0.25	189.61	3599.55	200.00	27.64	27.78 S	11.61 E	30.10@	157.32	0.00
3800.00	0.25	98.67	3799.55	200.00	28.13	28.27 S	11.97 E	30.70@	157.06	0.18
4000.00	0.25	349.73	3999.55	200.00	27.76	27.91 S	12.32 E	30.51@	156.18	0.20
4200.00	0.25	329.78	4199.55	200.00	26.96	27.10 S	12.02 E	29.65@	156.08	0.04
4400.00	0.25	359.84	4399.55	200.00	26.15	26.29 S	11.80 E	28.82@	155.82	0.06
4600.00	0.50	315.90	4599.54	200.00	25.09	25.22 S	11.19 E	27.60@	156.07	0.18
4800.00	0.50	323.95	4799.53	200.00	23.77	23.89 S	10.07 E	25.93@	157.14	0.03
5000.00	0.75	331.01	4999.52	200.00	21.94	22.04 S	8.92 E	23.78@	157.96	0.13

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
RIG:PATTERSON RIG 75

Page 02/05

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)
5200.00	0.75	266.06	5199.51	200.00	20.90	20.99 S	6.98 E	22.12@	161.59	0.40
5400.00	0.25	259.12	5399.50	200.00	21.10	21.16 S	5.25 E	21.80@	166.07	0.25
5600.00	0.50	239.18	5599.49	200.00	21.64	21.69 S	4.07 E	22.07@	169.37	0.14
5800.00	0.50	229.23	5799.49	200.00	22.67	22.71 S	2.66 E	22.86@	173.32	0.04
6000.00	0.75	216.10	5999.48	200.00	24.32	24.33 S	1.23 E	24.36@	177.11	0.14
** TIE INTO MS GYROSCOPIC SURVEYS @ 6050' MD.										
6050.00	1.00	271.03	6049.47	50.00	24.58	24.59 S	0.60 E	24.60@	178.60	1.67
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
6137.00	1.06	184.28	6136.46	87.00	25.38	25.38 S	0.22 W	25.38@	180.49	1.63
6232.00	0.79	27.92	6231.46	95.00	25.67	25.68 S	0.02 E	25.68@	179.95	1.91
6335.00	0.70	23.97	6334.45	103.00	24.47	24.47 S	0.61 E	24.48@	178.57	0.10
6430.00	0.70	31.35	6429.44	95.00	23.43	23.45 S	1.15 E	23.48@	177.20	0.09
6526.00	0.53	34.08	6525.43	96.00	22.56	22.58 S	1.70 E	22.64@	175.69	0.18
6557.00	0.44	34.69	6556.43	31.00	22.34	22.36 S	1.85 E	22.44@	175.27	0.29
6589.00	2.20	182.08	6588.43	32.00	22.85	22.88 S	1.90 E	22.95@	175.26	8.07
6621.00	6.68	187.97	6620.32	32.00	25.31	25.33 S	1.62 E	25.39@	176.35	14.05
6653.00	12.66	189.38	6651.85	32.00	30.63	30.64 S	0.79 E	30.65@	178.53	18.70
6685.00	18.38	190.78	6682.67	32.00	39.07	39.06 S	0.73 W	39.07@	181.07	17.91
6717.00	21.63	191.58	6712.74	32.00	49.83	49.80 S	2.86 W	49.88@	183.28	10.19
6748.00	23.65	192.28	6741.35	31.00	61.53	61.48 S	5.33 W	61.71@	184.95	6.57
6780.00	25.94	191.40	6770.40	32.00	74.70	74.61 S	8.08 W	75.05@	186.18	7.25
6812.00	28.31	187.71	6798.88	32.00	89.11	88.99 S	10.48 W	89.61@	186.72	9.08
6844.00	31.04	186.13	6826.68	32.00	104.86	104.72 S	12.38 W	105.45@	186.74	8.87
6876.00	34.47	185.42	6853.59	32.00	122.10	121.94 S	14.11 W	122.76@	186.60	10.79
6908.00	38.08	184.19	6879.38	32.00	140.98	140.80 S	15.69 W	141.68@	186.36	11.51
6939.00	41.68	185.34	6903.17	31.00	160.80	160.61 S	17.35 W	161.54@	186.17	11.85
6971.00	44.49	185.95	6926.53	32.00	182.57	182.36 S	19.50 W	183.40@	186.10	8.88
7003.00	47.13	186.65	6948.84	32.00	205.41	205.16 S	22.02 W	206.34@	186.13	8.40
7035.00	49.86	187.36	6970.04	32.00	229.22	228.95 S	24.95 W	230.30@	186.22	8.69

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
RIG:PATTERSON RIG 75

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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)
7066.00	52.76	187.27	6989.42	31.00	253.25	252.94 S	28.03 W	254.49@	186.32	9.36
7098.00	56.01	186.30	7008.05	32.00	279.12	278.77 S	31.10 W	280.50@	186.37	10.45
7130.00	58.92	185.34	7025.26	32.00	305.98	305.61 S	33.83 W	307.47@	186.32	9.44
7162.00	61.91	184.72	7041.06	32.00	333.73	333.32 S	36.27 W	335.29@	186.21	9.50
7193.00	64.72	184.28	7054.98	31.00	361.36	360.93 S	38.44 W	362.98@	186.08	9.15
7225.00	67.88	184.19	7067.84	32.00	390.60	390.15 S	40.60 W	392.26@	185.94	9.88
7257.00	71.67	184.54	7078.90	32.00	420.56	420.09 S	42.89 W	422.27@	185.83	11.89
7289.00	75.27	184.72	7088.00	32.00	451.16	450.66 S	45.36 W	452.94@	185.75	11.26
7320.00	78.88	184.98	7094.93	31.00	481.29	480.76 S	47.92 W	483.14@	185.69	11.67
7352.00	82.83	184.98	7100.02	32.00	512.79	512.23 S	50.66 W	514.73@	185.65	12.34
7362.00	84.15	184.90	7101.15	10.00	522.69	522.13 S	51.52 W	524.66@	185.63	13.23
7394.00	88.20	185.25	7103.29	32.00	554.52	553.92 S	54.34 W	556.58@	185.60	12.70
7426.00	89.78	184.98	7103.85	32.00	586.42	585.79 S	57.19 W	588.58@	185.58	5.01
7458.00	90.40	184.46	7103.80	32.00	618.34	617.68 S	59.83 W	620.57@	185.53	2.53
7489.00	90.22	183.49	7103.63	31.00	649.29	648.61 S	61.97 W	651.56@	185.46	3.18
7553.00	89.96	182.43	7103.53	64.00	713.23	712.52 S	65.28 W	715.50@	185.23	1.71
7648.00	89.16	180.85	7104.26	95.00	808.21	807.47 S	68.00 W	810.33@	184.81	1.86
7744.00	89.96	180.50	7105.00	96.00	904.21	903.46 S	69.13 W	906.10@	184.38	0.91
7839.00	90.48	180.85	7104.63	95.00	999.21	998.46 S	70.25 W	1000.92@	184.02	0.66
7934.00	89.96	179.97	7104.27	95.00	1094.21	1093.45 S	70.93 W	1095.75@	183.71	1.08
8030.00	90.31	181.29	7104.04	96.00	1190.20	1189.44 S	71.98 W	1191.62@	183.46	1.42
8125.00	89.34	180.06	7104.33	95.00	1285.20	1284.43 S	73.10 W	1286.51@	183.26	1.65
8220.00	88.72	180.32	7105.94	95.00	1380.18	1379.42 S	73.42 W	1381.37@	183.05	0.71
8316.00	89.16	179.01	7107.72	96.00	1476.15	1475.40 S	72.86 W	1477.20@	182.83	1.44
8411.00	90.04	179.36	7108.38	95.00	1571.11	1570.38 S	71.51 W	1572.01@	182.61	1.00
8506.00	91.28	179.36	7107.29	95.00	1666.08	1665.37 S	70.44 W	1666.86@	182.42	1.30
8601.00	92.59	179.62	7104.08	95.00	1761.00	1760.31 S	69.60 W	1761.69@	182.26	1.41
8697.00	89.78	177.95	7102.09	96.00	1856.92	1856.25 S	67.56 W	1857.48@	182.08	3.41

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
RIG:PATTERSON RIG 75

Page 04/05

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	(dg/100ft)
8792.00	89.25	177.25	7102.90	95.00	1951.78	1951.17 S	63.59 W	1952.20@	181.87	0.92
8888.00	88.99	176.99	7104.37	96.00	2047.58	2047.04 S	58.76 W	2047.88@	181.64	0.38
8983.00	90.48	177.16	7104.81	95.00	2142.39	2141.91 S	53.91 W	2142.59@	181.44	1.58
9078.00	91.19	177.34	7103.43	95.00	2237.21	2236.79 S	49.36 W	2237.33@	181.26	0.77
9173.00	92.15	178.30	7100.66	95.00	2332.05	2331.68 S	45.75 W	2332.12@	181.12	1.43
9268.00	91.80	179.71	7097.38	95.00	2426.95	2426.60 S	44.10 W	2427.00@	181.04	1.53
9363.00	89.96	178.39	7095.93	95.00	2521.90	2521.57 S	42.52 W	2521.93@	180.97	2.38
9458.00	89.69	176.90	7096.22	95.00	2616.76	2616.49 S	38.62 W	2616.77@	180.85	1.59
9554.00	90.57	178.92	7096.00	96.00	2712.64	2712.42 S	35.12 W	2712.65@	180.74	2.29
9649.00	90.04	180.94	7095.49	95.00	2807.63	2807.41 S	35.00 W	2807.63@	180.71	2.20
9744.00	90.84	181.56	7094.76	95.00	2902.62	2902.39 S	37.07 W	2902.62@	180.73	1.07
9840.00	90.13	181.64	7093.95	96.00	2998.60	2998.34 S	39.75 W	2998.61@	180.76	0.74
9935.00	90.04	181.56	7093.81	95.00	3093.59	3093.31 S	42.41 W	3093.60@	180.79	0.13
10030.00	88.81	179.53	7094.76	95.00	3188.58	3188.29 S	43.31 W	3188.59@	180.78	2.50
10126.00	91.63	180.41	7094.39	96.00	3284.56	3284.28 S	43.26 W	3284.56@	180.75	3.08
10221.00	91.89	181.47	7091.48	95.00	3379.51	3379.22 S	44.82 W	3379.52@	180.76	1.15
10316.00	92.07	181.91	7088.19	95.00	3474.44	3474.12 S	47.62 W	3474.45@	180.79	0.50
10412.00	91.71	181.91	7085.03	96.00	3570.37	3570.02 S	50.82 W	3570.38@	180.82	0.38
10507.00	90.57	181.82	7083.14	95.00	3665.33	3664.95 S	53.91 W	3665.34@	180.84	1.20
10602.00	89.60	179.18	7083.00	95.00	3760.32	3759.93 S	54.74 W	3760.33@	180.83	2.96
10698.00	91.01	180.41	7082.49	96.00	3856.30	3855.93 S	54.39 W	3856.31@	180.81	1.95
10793.00	89.87	179.62	7081.76	95.00	3951.29	3950.92 S	54.42 W	3951.30@	180.79	1.46
10888.00	88.55	178.39	7083.07	95.00	4046.23	4045.89 S	52.77 W	4046.24@	180.75	1.90
10984.00	90.31	178.92	7084.02	96.00	4142.17	4141.86 S	50.51 W	4142.17@	180.70	1.91
11079.00	94.09	180.32	7080.37	95.00	4237.06	4236.77 S	49.88 W	4237.06@	180.67	4.24
11174.00	94.26	180.59	7073.46	95.00	4331.81	4331.51 S	50.64 W	4331.81@	180.67	0.34
11270.00	92.95	180.15	7067.42	96.00	4427.61	4427.32 S	51.25 W	4427.61@	180.66	1.44
11365.00	90.13	179.01	7064.87	95.00	4522.55	4522.27 S	50.56 W	4522.55@	180.64	3.20

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY, NM
RIG:PATTERSON RIG 75

Page 05/05

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)
11383.00	90.13	179.36	7064.83	18.00	4540.55	4540.27 S 50.30 W	4540.55@ 180.63	1.94
STRAIGHT LINE PROJECTION TO BIT @ 11450' MD.								
11450.00	90.13	179.36	7064.68	67.00	4607.53	4607.26 S 49.55 W	4607.53@ 180.62	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM		
LEASE / WELL No.:	SHOCKER 32 STATE	#3H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	PATTERSON #75		
API WELL No:	30-015-36220		
JOB No:	700002074-WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	P.E.S.		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):		7.62	
On Wall Plat:	7.72	LWD Calculated:	7.62
X = 603709.900000 Feet		Y = 397541.400000 Feet	
SITE LATITUDE: 32.092515		SITE LONGITUDE: -103.998444	
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE: NEW MEXICO EAST	
PROPOSED DRIFT DIRECTION:		180.67	
KELLY BUSHING ELEVATION:		3006	
ALTITUDE:	2983 Feet	WATER DEPTH:	Feet

TIE-IN SURVEY

MEASURED DEPTH:	6050		
DRIFT ANGLE:	1		
DRIFT DIRECTION:	271.03		
TRUE VERTICAL DEPTH:	6049.47		
VERTICAL SECTION:	24.58		
RECTANGULAR COORDINATE (N / S):	24.59		
RECTANGULAR COORDINATE (E / W):	0.6		
CLOSURE DISTANCE / DIRECTION:	24.59	178.6	
SURVEY CALCULATION METHOD:	☒ MC ☐ RC ☐ BT ☐		
SOURCE OF TIE-IN DATA (COMPANY):	Winserve		
COPY OF TIE-IN SURVEY REPORT	☒ YES	☐ NO	

WELL PLAN

KICKOFF DEPTH:	6632	TOTAL DEPTH:	11557
KICKOFF ANGLE:	12	MAX ANGLE:	91

PES Engineers: _____

**Signature of both field engineers required if applicable

Directional Driller: _____

DATE: 4-Apr-2011

MS SURVEY
ODESSA, TEXAS

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

* **YATES PETROLEUM** *

JOB NUMBER: SVCO-110378

WELL NAME: SHOCKER 32 STATE #003H

LOCATION: EDDY, NEW MEXICO

SURVEY DATE: APRIL 11, 2011

SURVEY ENGINEER: GARY SPARKS

MAGNETIC DECLINATION: 07.72E GRID NORTH

GYRO REFERENCE BEARING: GRID NORTH

VERTICAL SECTION CALCULATED IN A
PROPOSAL DIRECTION OF: 180.67
SURF. ELEVATION: RKB:23'

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

***** THIS DIRECTIONAL SURVEY REPORT IS *****
** CORRECT TO THE BEST OF MY KNOWLEDGE **
* AND IS SUPPORTED BY ACTUAL FIELD DATA! *
**
**
**
** *****
** COMPANY REPRESENTATIVE **

COMMENTS: RIG:PATTERSON 75

MS SURVEY
ODESSA, TEXAS

JOB NUMBER: SVCO-110378

WELL NAME: SHOCKER 32 STATE #003H

INRUN SURVEY
BY MINIMUM CURVATURE

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	199.99	1.44	0.991	01.00	215.25	1.43 S	1.01 W	0.50	1.00	1.75	AT 215.25
400.0	399.95	5.04	2.195	01.25	186.31	5.02 S	2.25 W	0.31	0.61	5.50	AT 204.19
600.0	599.92	8.52	2.357	00.75	178.37	8.50 S	2.46 W	0.26	0.52	8.84	AT 196.13
800.0	799.90	11.14	2.413	00.75	185.42	11.11 S	2.54 W	0.05	0.09	11.39	AT 192.90
1000.0	999.88	14.18	2.577	01.00	182.48	14.15 S	2.74 W	0.13	0.25	14.42	AT 190.97
1200.0	1199.86	16.77	3.633	00.75	230.53	16.73 S	3.83 W	0.37	0.75	17.16	AT 192.89
1400.0	1399.84	18.83	5.122	00.75	202.59	18.77 S	5.34 W	0.18	0.36	19.52	AT 195.89
1600.0	1599.83	20.56	6.316	00.50	234.65	20.48 S	6.56 W	0.21	0.42	21.51	AT 197.75
1800.0	1799.83	20.87	7.407	00.25	298.71	20.78 S	7.65 W	0.23	0.45	22.14	AT 200.21
2000.0	1999.83	21.05	7.009	00.50	116.76	20.96 S	7.25 W	0.37	0.75	22.18	AT 199.09
2200.0	2199.79	21.44	3.607	01.50	090.82	21.39 S	3.86 W	0.54	1.07	21.74	AT 190.22
2400.0	2399.70	21.58	-2.498	02.00	092.87	21.60 S	2.25 E	0.25	0.50	21.72	AT 174.07
2600.0	2599.61	22.04	-8.582	01.50	097.93	22.14 S	8.32 E	0.26	0.52	23.65	AT 159.40
2800.0	2799.57	23.20	-12.192	00.75	129.99	23.34 S	11.92 E	0.48	0.95	26.21	AT 152.95
3000.0	2999.56	24.34	-12.899	00.25	225.05	24.49 S	12.61 E	0.41	0.81	27.55	AT 152.75
3200.0	3199.56	25.50	-12.376	00.50	195.10	25.64 S	12.08 E	0.15	0.31	28.35	AT 154.78
3400.0	3399.55	26.77	-12.079	00.25	191.22	26.91 S	11.77 E	0.13	0.25	29.37	AT 156.39
3600.0	3599.55	27.63	-11.931	00.25	189.61	27.77 S	11.61 E	0.00	0.01	30.10	AT 157.32
3800.0	3799.55	28.13	-12.296	00.25	098.67	28.27 S	11.97 E	0.18	0.36	30.70	AT 157.06
4000.0	3999.55	27.76	-12.645	00.25	349.73	27.90 S	12.32 E	0.20	0.41	30.50	AT 156.18
4200.0	4199.55	26.96	-12.338	00.25	329.78	27.10 S	12.02 E	0.04	0.09	29.65	AT 156.08
4400.0	4399.55	26.14	-12.108	00.25	359.84	26.28 S	11.80 E	0.06	0.13	28.81	AT 155.82
4600.0	4599.54	25.09	-11.487	00.50	315.90	25.22 S	11.19 E	0.18	0.36	27.59	AT 156.07
4800.0	4799.53	23.77	-10.351	00.50	323.95	23.89 S	10.07 E	0.04	0.07	25.93	AT 157.14
5000.0	4999.52	21.93	-9.181	00.75	331.01	22.04 S	8.92 E	0.13	0.26	23.78	AT 157.96
5200.0	5199.51	20.90	-7.229	00.75	266.06	20.98 S	6.98 E	0.40	0.81	22.12	AT 161.59
5400.0	5399.50	21.09	-5.496	00.25	259.12	21.16 S	5.25 E	0.25	0.50	21.80	AT 166.07
5600.0	5599.50	21.64	-4.325	00.50	239.18	21.69 S	4.07 E	0.14	0.28	22.06	AT 169.37
5800.0	5799.49	22.67	-2.926	00.50	229.23	22.70 S	2.66 E	0.04	0.09	22.86	AT 173.31
6000.0	5999.48	24.31	-1.513	00.75	216.10	24.33 S	1.23 E	0.14	0.29	24.36	AT 177.11
6050.0	6049.47	24.58	-0.887	01.00	271.03	24.59 S	0.60 E	1.67	0.84	24.59	AT 178.60

 * THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF *
 * 6050.00 FEET EQUALS 24.59 FEET AT 178.60 *
 * *****



A Schlumberger Company

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
SHOCKER 32 STATE #3H
EDDY COUNTY, NEW MEXICO
Rig:PATTERSON 75

Wed Mar 30 18:42:08 2011

Coordinates

Latitude: 32.092515 N (32 deg. 5 min. 33.0524 sec.)
Longitude: 103.998444 W (-103 deg. 59 min. 54.3972 sec.)
Elevation: 3001.00 feet.
Calculation Date: Mar/30/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 59.9948 degrees
Total Magnetic Field: 0.48513 gauss
Magnetic Declination: 7.796002 degrees
Horizontal Intensity: 0.242602 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.796002 Degs

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 603709.9000 feet
Y: 397541.4000 feet
True to Grid: (convergence) -0.177924 degrees
Magnetic to Grid: 7.618078 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.618078 Degs.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM CORPORATION
SHOCKER 32 STATE #3H
EDDY COUNTY
Rig: PATTERSON RIG 75

Sun Apr 03 23:23:44 2011

Coordinates

Latitude: 32.092515 N (32 deg. 5 min. 33.0540 sec.)
Longitude: 103.998444 W (-103 deg. 59 min. 54.3984 sec.)
Elevation: 3006.00 feet.
Calculation Date: Apr/03/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 59.9945 degrees
Total Magnetic Field: 0.48534 gauss
Magnetic Declination: 7.796192 degrees
Horizontal Intensity: 0.242711 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.796192 Degr

Field copy

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 603709.8006 feet
Y: 397541.5572 feet
True to Grid: (convergence) -0.177924 degrees
Magnetic to Grid: 7.618268 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.618268 Degr.