

30-015-40071

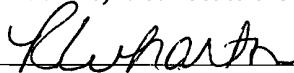
OCCIDENTAL PERMIAN LTD.

Undesignated
Eddy County, NM
Swearingen A Fee Com #3H
VH - Job #32K0612668

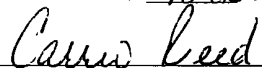
Survey: Gyro

SDI Standard Survey Report

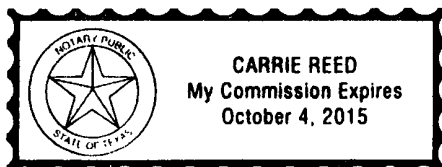
This survey is correct to the best of my knowledge and is supported by actual field data.



Notarized this date 18th of July, 2012.



Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.

SDI Standard Survey Report



Company:	OCCIDENTAL PERMIAN LTD	Local Co-ordinate Reference:	Well Swearingen A Fee Com #3H
Project:	Undesignated	TVD Reference:	WELL @ 0 00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0 00usft (Original Well Elev)
Well:	Swearingen A Fee Com #3H	North Reference:	Grid
Wellbore:	VH - Job #32K0612668	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0612668	Database:	EDM-Regulatory

Project	Undesignated		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Eddy County, NM			
Site Position:		Northing:	461,988 00 usft	Latitude:	32° 16' 8 400 N
From:	Lat/Long	Easting:	664,537 94 usft	Longitude:	103° 48' 3 600 W
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0 28 °

Well	Swearingen A Fee Com #3H, Directional (Weatherford)					
Well Position	+N/-S	0 00 usft	Northing:	483,097 02 usft	Latitude:	32° 19' 40 573 N
	+E/-W	0 00 usft	Easting:	571,571 99 usft	Longitude:	104° 6' 5 846 W
Position Uncertainty		0 00 usft	Wellhead Elevation:	usft	Ground Level:	0 00 usft

Wellbore	VH - Job #32K0612668				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	06/04/12	7 71	60 19	48,590

Design	VH - Job #32K0612668			
Audit Notes:				
Version:	1 0	Phase:	ACTUAL	Tie On Depth: 0 00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 00	0 00	0 00	274 68

Survey Program		Date	07/19/12		
From (usft)	To (usft)	Survey (Wellbore)		Tool Name	Description
100 00	400 00	Gyro (VH - Job #32K0612668)		Keeper	Keeper Surface Readout

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
100 00	0 61	161 29	100 00	-0 50	0 17	161 29	0 53
200 00	0 86	150 48	199 99	-1 66	0 71	156 82	1 81
300 00	1 33	139 66	299 97	-3 20	1 83	150 20	3 69
400 00	1 50	137 57	399 94	-5 05	3 47	145 53	6 13



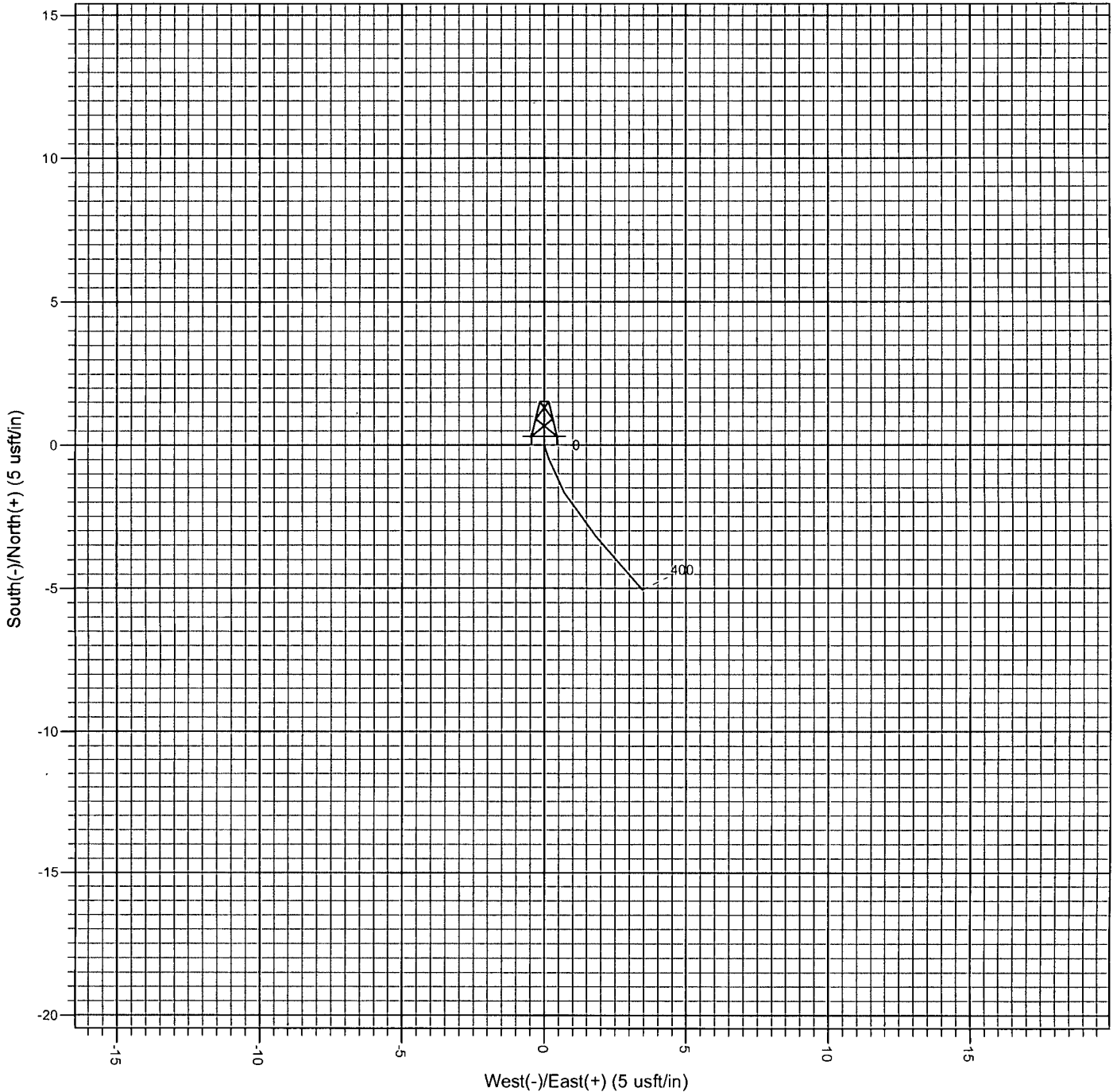
Scientific Drilling
Directional Drilling Operations

Project: Undesignated
Eddy County, NM
Well: Swearingen A Fee Com #3H
Wellbore: VH - Job #32K0612668
Design: VH - Job #32K0612668

WELL DETAILS: Swearingen A Fee Com #3H
WELL @ 0.00usft (Original Well Elev)

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	483097.02	571571.99	32° 19' 40.573 N	104° 6' 5.846 W	



PROJECT DETAILS: Undesignated	SITE DETAILS: Eddy County, NM
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 16' 8.400 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 103° 48' 3.600 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.00
Zone: New Mexico East 3001	Convergence: 0.28
System Datum: Mean Sea Level	Local North: Grid



Weatherford®

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Occidental Permian Ltd.
5 Greenway Plaza Suite 110
Houston Tx 77046

Date: June 25, 2012

Attention: Anar Khalilov

Re: Occidental Permian Ltd
Well: Swearingen A Fee Com #3H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

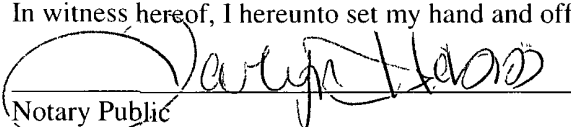
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Nguyen MWD Supervisor	3H	503.00' MD 12133.00' MD	6/05/2012 6/24/2012	Measurement While Drilling

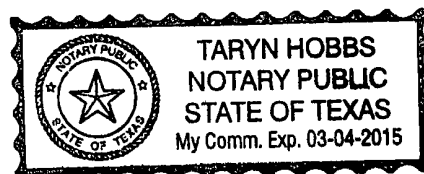
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jesus Aguilar
MWD Coordinator

On this, the 25th day of June, 2012, before me a notary public, the undersigned officer, personally appeared Jesus Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public





Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 6/25/2012	Time: 06:50 04	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: Swearingen A Fee Com 3H, Grid Nort		
Site: Swearingen A Fee Com 3H	Vertical (TVD) Reference: SITE 3039.1		
Well: Swearingen A Fee Com 3H	Section (VS) Reference: Well (0.00N,0.00E,274 68Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 6/7/2012
Company: Weatherford International Ltd	Engineer: Patrick Rudolph
Tool: MWD;MWD - Standard	Tied-to: User Defined

Field: Eddy Co, NM (Nad 27)	
Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: IGRF2010

Site: Swearingen A Fee Com 3H	
Site Position:	Northing: 483097 00 ft
From: Map	Easting: 571572 00 ft
Position Uncertainty: 0 00 ft	Latitude: 32 19 40 573 N
Ground Level: 3014 10 ft	Longitude: 104 6 5 846 W
	North Reference: Grid
	Grid Convergence: 0.12 deg

Well: Swearingen A Fee Com 3H	Slot Name:
Well Position: +N/-S 0 00 ft	Northing: 483097 00 ft
+E/-W 0 00 ft	Easting: 571572 00 ft
Position Uncertainty: 0 00 ft	Latitude: 32 19 40.573 N
	Longitude: 104 6 5 846 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0 00 ft
Magnetic Data: 5/1/2012	Above System Datum: Mean Sea Level
Field Strength: 48558 nT	Declination: 7 73 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60 17 deg
ft	+N/-S
	ft
0 00	0.00
	0.00
	274 68

Survey										
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
335.04	1 39	138.87	335.00	-3 83	2 37	0 00	-2.68	483093.17	571574 37	Csg 1 Tie on Gyro First Wft Svy
400 00	1 50	137.57	399 94	-5 05	3 47	0 18	-3 87	483091.95	571575.47	
503 00	1 21	135 92	502.91	-6 83	5 13	0 28	-5 67	483090 17	571577 13	
593 00	0 94	115.17	592 90	-7 82	6 46	0 52	-7 08	483089.18	571578 46	
685 00	0 70	96 47	684 89	-8 21	7.70	0.39	-8 35	483088.79	571579 70	
777 00	0 58	24.34	776 88	-7 85	8 45	0 83	-9 07	483089 15	571580 45	
869 00	0 85	352 25	868 88	-6 75	8 55	0 51	-9 08	483090 25	571580 55	
961 00	1 15	347 43	960 86	-5 17	8.26	0 34	-8 65	483091 83	571580 26	
1051.00	1 58	343 90	1050 84	-3 09	7 72	0 49	-7 95	483093 91	571579.72	
1143.00	1 23	332 90	1142 81	-1 00	6.92	0 48	-6 98	483096 00	571578 92	
1236.00	1 30	311 01	1235 79	0 58	5.67	0 52	-5 60	483097 58	571577 67	
1328 00	1 24	305 99	1327 76	1 85	4.07	0 14	-3 91	483098 85	571576 07	
1420 00	1 37	311 33	1419 74	3 16	2 44	0 19	-2 18	483100 16	571574 44	
1512.00	1 08	310 67	1511 72	4.46	0.96	0 32	-0 59	483101 46	571572 96	
1604 00	0 86	304 34	1603.71	5 41	-0.27	0 27	0 71	483102 41	571571 73	
1695 00	0 20	343 55	1694.70	5.95	-0.88	0 79	1 36	483102.95	571571.12	
1789.00	0 69	88 53	1788 70	6 12	-0.36	0 82	0 86	483103 12	571571.64	
1884 00	0 11	333.28	1883 70	6 22	0 17	0 78	0 33	483103 22	571572 17	
1978 00	0 11	212 39	1977.70	6 22	0 08	0 20	0 42	483103.22	571572.08	
2073.00	0 65	113 96	2072 69	5 92	0 53	0 71	-0 04	483102 92	571572 53	
2167.00	1 14	105 80	2166 68	5 45	1 92	0 54	-1 46	483102 45	571573.92	
2262 00	0 71	102 74	2261.67	5 07	3 40	0 46	-2 97	483102 07	571575.40	
2357.00	0 25	118 61	2356.67	4 84	4 15	0 50	-3 75	483101 84	571576.15	
2451.00	0 60	111 86	2450.66	4 56	4 79	0 38	-4 40	483101 56	571576.79	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 6/25/2012	Time: 06:50.04	Page: 2
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: Swearingen A Fee Com 3H, Grid Nort		
Site: Swearingen A Fee Com 3H	Vertical (TVD) Reference: SITE 3039.1		
Well: Swearingen A Fee Com 3H	Section (VS) Reference: Well (0.00N,0.00E,274.68Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
2486.00	0.40	131.49	2485.66	4.41	5.05	0.74	-4.68	483101.41	571577.05	
2560.34	0.48	118.28	2560.00	4.09	5.52	0.17	-5.17	483101.09	571577.52	Csg 2
2594.00	0.52	113.72	2593.66	3.96	5.78	0.17	-5.44	483100.96	571577.78	
2626.00	0.49	116.56	2625.66	3.84	6.04	0.12	-5.71	483100.84	571578.04	
2720.00	0.11	32.18	2719.66	3.74	6.45	0.52	-6.12	483100.74	571578.45	
2815.00	0.81	327.27	2814.65	4.38	6.13	0.81	-5.75	483101.38	571578.13	
2909.00	1.04	330.99	2908.64	5.68	5.36	0.25	-4.88	483102.68	571577.36	
3004.00	0.95	334.23	3003.63	7.15	4.60	0.11	-4.00	483104.15	571576.60	
3098.00	0.91	323.84	3097.61	8.45	3.82	0.18	-3.12	483105.45	571575.82	
3192.00	0.81	332.18	3191.60	9.64	3.07	0.17	-2.27	483106.64	571575.07	
3287.00	0.81	329.35	3286.59	10.81	2.41	0.04	-1.52	483107.81	571574.41	
3381.00	0.70	325.36	3380.59	11.86	1.75	0.13	-0.78	483108.86	571573.75	
3476.00	0.78	318.16	3475.58	12.82	0.99	0.13	0.06	483109.82	571572.99	
3571.00	0.80	317.54	3570.57	13.79	0.11	0.02	1.02	483110.79	571572.11	
3665.00	1.02	319.71	3664.56	14.91	-0.88	0.24	2.09	483111.91	571571.12	
3760.00	1.10	319.31	3759.54	16.25	-2.02	0.08	3.34	483113.25	571569.98	
3854.00	1.18	317.14	3853.52	17.64	-3.26	0.10	4.69	483114.64	571568.74	
3949.00	1.09	309.58	3948.50	18.93	-4.63	0.18	6.15	483115.93	571567.37	
4043.00	1.19	307.11	4042.49	20.09	-6.09	0.12	7.71	483117.09	571565.91	
4138.00	1.30	304.91	4137.46	21.30	-7.76	0.13	9.48	483118.30	571564.24	
4233.00	1.37	304.07	4232.44	22.56	-9.59	0.08	11.40	483119.56	571562.41	
4327.00	1.34	303.89	4326.41	23.80	-11.43	0.03	13.33	483120.80	571560.57	
4422.00	1.62	284.47	4421.38	24.75	-13.65	0.60	15.63	483121.75	571558.35	
4516.00	1.79	285.44	4515.34	25.48	-16.36	0.18	18.38	483122.48	571555.64	
4611.00	1.47	274.28	4610.30	25.96	-19.00	0.47	21.06	483122.96	571553.00	
4706.00	1.22	256.78	4705.27	25.82	-21.20	0.50	23.24	483122.82	571550.80	
4800.00	1.18	247.33	4799.25	25.22	-23.07	0.21	25.05	483122.22	571548.93	
4895.00	1.25	240.27	4894.23	24.33	-24.87	0.17	26.77	483121.33	571547.13	
4989.00	1.09	251.03	4988.21	23.53	-26.61	0.29	28.44	483120.53	571545.39	
5084.00	1.07	256.01	5083.20	23.02	-28.32	0.10	30.10	483120.02	571543.68	
5178.00	1.15	252.25	5177.18	22.52	-30.07	0.12	31.81	483119.52	571541.93	
5273.00	1.16	248.98	5272.16	21.89	-31.88	0.07	33.56	483118.89	571540.12	
5367.00	0.87	209.29	5366.14	20.92	-33.11	0.79	34.71	483117.92	571538.89	
5462.00	0.93	192.96	5461.13	19.54	-33.64	0.28	35.12	483116.54	571538.36	
5556.00	0.75	199.48	5555.12	18.22	-34.02	0.22	35.39	483115.22	571537.98	
5651.00	0.89	197.36	5650.11	16.93	-34.44	0.15	35.71	483113.93	571537.56	
5746.00	0.81	205.20	5745.10	15.62	-34.95	0.15	36.11	483112.62	571537.05	
5840.00	0.77	208.30	5839.09	14.46	-35.53	0.06	36.59	483111.46	571536.47	
5935.00	0.95	218.40	5934.08	13.28	-36.32	0.25	37.29	483110.28	571535.68	
6029.00	1.03	217.91	6028.07	12.00	-37.33	0.09	38.18	483109.00	571534.67	
6124.00	1.34	228.53	6123.05	10.59	-38.68	0.40	39.42	483107.59	571533.32	
6218.00	1.28	230.57	6217.02	9.20	-40.32	0.08	40.93	483106.20	571531.68	
6313.00	1.06	243.05	6312.00	8.13	-41.92	0.35	42.44	483105.13	571530.08	
6408.00	0.96	273.03	6406.99	7.77	-43.50	0.56	43.99	483104.77	571528.50	
6502.00	1.04	248.94	6500.98	7.51	-45.08	0.45	45.54	483104.51	571526.92	
6597.00	0.93	236.16	6595.96	6.77	-46.53	0.26	46.92	483103.77	571525.47	
6691.00	1.40	243.41	6689.94	5.83	-48.19	0.52	48.50	483102.83	571523.81	
6786.00	1.39	249.39	6784.91	4.90	-50.30	0.15	50.54	483101.90	571521.70	
6881.00	1.11	245.73	6879.89	4.12	-52.22	0.31	52.38	483101.12	571519.78	
6975.00	1.31	250.02	6973.87	3.38	-54.06	0.23	54.16	483100.38	571517.94	
7070.00	1.30	256.49	7068.85	2.76	-56.13	0.16	56.17	483099.76	571515.87	
7164.00	1.10	252.59	7162.83	2.24	-58.03	0.23	58.02	483099.24	571513.97	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 6/25/2012	Time: 06 50:04	Page: 3
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: Swearingen A Fee Com 3H, Grid Nort		
Site: Swearingen A Fee Com 3H	Vertical (TVD) Reference: SITE 3039 1		
Well: Swearingen A Fee Com 3H	Section (VS) Reference: Well (0 00N,0.00E,274.68Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7190.00	1 11	254.64	7188.82	2.09	-58.51	0 16	58 48	483099.09	571513.49	
7222.00	1.02	245.75	7220.82	1.90	-59.07	0 59	59 02	483098.90	571512.93	
7253.00	2 34	259.55	7251.80	1.67	-59.94	4.42	59 88	483098.67	571512.06	
7285.00	4 80	269.06	7283.74	1.53	-61.92	7 88	61 84	483098.53	571510.08	
7316.00	7 03	273.83	7314.57	1.63	-65.11	7.36	65 03	483098.63	571506.89	
7348.00	9 26	279.26	7346.25	2.18	-69.61	7.36	69 55	483099.18	571502.39	
7379.00	11 34	280.79	7376.75	3.15	-75.06	6.77	75 07	483100.15	571496.94	
7411.00	13 36	280.88	7408.00	4.44	-81.79	6.31	81.87	483101.44	571490.21	
7443.00	15 86	280.55	7438.97	5.94	-89.72	7 82	89.90	483102.94	571482.28	
7474.00	18.41	280.66	7468.59	7.62	-98.69	8.23	98.98	483104.62	571473.31	
7506.00	20.75	281.00	7498.73	9.63	-109.22	7.32	109.65	483106.63	571462.78	
7537.00	23.27	280.92	7527.47	11.84	-120.63	8 13	121 19	483108.84	571451.37	
7569.00	25.49	280.91	7556.62	14.34	-133.60	6 94	134 32	483111.34	571438.40	
7600.00	27 37	280.49	7584.38	16.90	-147.16	6 09	148 04	483113.90	571424.84	
7632.00	29 43	280.64	7612.52	19.69	-162.12	6 44	163 18	483116.69	571409.88	
7663.00	31 93	281.36	7639.18	22.72	-177.64	8.15	178 90	483119.72	571394.36	
7695.00	34.36	282.30	7665.97	26.31	-194.76	7.76	196.26	483123.31	571377.24	
7727.00	36 89	282.21	7691.98	30.26	-212.98	7 91	214 74	483127.26	571359.02	
7758.00	39 40	282.26	7716.36	34.32	-231.69	8.10	233 72	483131.32	571340.31	
7789.00	41.83	282.27	7739.89	38.61	-251.41	7 84	253.72	483135.61	571320.59	
7821.00	44 51	282.20	7763.23	43.24	-272.80	8 38	275 42	483140.24	571299.20	
7853.00	47 19	281.92	7785.52	48.04	-295.25	8.40	298 19	483145.04	571276.75	
7884.00	49.64	281.72	7806.09	52.79	-317.95	7.92	321 19	483149.79	571254.05	
7916.00	52.42	281.38	7826.21	57.77	-342.32	8.73	345 89	483154.77	571229.68	
7947.00	55.17	281.42	7844.52	62.71	-366.84	8.87	370.73	483159.71	571205.16	
7979.00	57 82	281.28	7862.18	67.96	-393.00	8.29	397.23	483164.96	571179.00	
8010.00	60.51	281.26	7878.07	73.16	-419.10	8 68	423 67	483170.16	571152.90	
8042.00	63.37	280.89	7893.12	78.59	-446.81	9 00	451.73	483175.59	571125.19	
8073.00	66.24	280.50	7906.32	83.79	-474.37	9 33	479 62	483180.79	571097.63	
8105.00	68.72	279.67	7918.57	88.96	-503.47	8 11	509 05	483185.96	571068.53	
8136.00	71.49	278.78	7929.12	93.64	-532.24	9 33	538 11	483190.64	571039.76	
8168.00	74.20	277.85	7938.56	98.05	-562.49	8 91	568 62	483195.05	571009.51	
8200.00	77 02	276.88	7946.51	102.03	-593.23	9 29	599 58	483199.03	570978.77	
8231.00	79 82	276.26	7952.74	105.50	-623.40	9 24	629 93	483202.50	570948.60	
8263.00	82.73	275.67	7957.59	108.79	-654.85	9 27	661 54	483205.79	570917.15	
8293.00	85.83	274.66	7960.58	111.47	-684.58	10.86	691 39	483208.47	570887.42	
8326.00	87 44	274.18	7962.52	114.01	-717.42	5 09	724 33	483211.01	570854.58	
8389.00	88 00	274.17	7965.02	118.59	-780.20	0 89	787 28	483215.59	570791.80	
8420.00	88 14	273.91	7966.07	120.78	-811.11	0 95	818 26	483217.78	570760.89	
8452.00	88 56	274.18	7966.99	123.03	-843.02	1.56	850.24	483220.03	570728.98	
8547.00	89 26	274.07	7968.79	129.86	-937.75	0.75	945 22	483226.86	570634.25	
8641.00	90.04	273.92	7969.37	136.41	-1031.52	0.84	1039 21	483233.41	570540.48	
8736.00	90.60	273.75	7968.84	142.77	-1126.31	0.62	1134 20	483239.77	570445.69	
8830.00	91.37	273.28	7967.22	148.53	-1220.11	0.96	1228 17	483245.53	570351.89	
8925.00	92 28	273.21	7964.20	153.90	-1314.91	0.96	1323 09	483250.90	570257.09	
9020.00	91.65	272.94	7960.94	159.00	-1409.72	0.72	1417.99	483256.00	570162.28	
9114.00	92.35	272.86	7957.66	163.75	-1503.54	0.75	1511 89	483260.75	570068.46	
9209.00	91.37	272.63	7954.58	168.30	-1598.38	1 06	1606 78	483265.30	569973.62	
9304.00	90.88	271.59	7952.71	171.79	-1693.30	1 21	1701 67	483268.79	569878.70	
9398.00	90 67	271.87	7951.44	174.63	-1787.25	0.37	1795.54	483271.63	569784.75	
9493.00	89.05	272.04	7951.67	177.87	-1882.19	1.71	1890 42	483274.87	569689.81	
9588.00	89 96	271.65	7952.49	180.93	-1977.13	1 04	1985.30	483277.93	569594.87	
9682.00	91 16	271.59	7951.57	183.59	-2071.09	1 28	2079.16	483280.59	569500.91	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd	Date: 6/25/2012	Time: 06.50.04	Page: 4
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well Swearingen A Fee Com 3H, Grid Nort		
Site: Swearingen A Fee Com 3H	Vertical (TVD) Reference: SITE 3039.1		
Well: Swearingen A Fee Com 3H	Section (VS) Reference: Well (0.00N,0.00E,274 68Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
9777.00	89.89	272.36	7950.70	186.86	-2166.03	1.56	2174.05	483283.86	569405.97	
9871.00	90.74	271.83	7950.19	190.30	-2259.96	1.07	2267.95	483287.30	569312.04	
9966.00	89.89	273.36	7949.66	194.60	-2354.86	1.84	2362.88	483291.60	569217.14	
10061.00	89.61	274.86	7950.08	201.41	-2449.61	1.61	2457.88	483298.41	569122.39	
10155.00	90.18	275.01	7950.25	209.49	-2543.26	0.63	2551.87	483306.49	569028.74	
10250.00	88.98	275.58	7950.95	218.26	-2637.85	1.40	2646.86	483315.26	568934.15	
10344.00	89.26	275.58	7952.39	227.40	-2731.39	0.30	2740.84	483324.40	568840.61	
10439.00	89.68	275.65	7953.27	236.69	-2825.93	0.45	2835.82	483333.69	568746.07	
10534.00	90.25	275.30	7953.33	245.76	-2920.50	0.70	2930.81	483342.76	568651.50	
10628.00	90.95	274.71	7952.34	253.96	-3014.14	0.97	3024.81	483350.96	568557.86	
10723.00	90.81	274.46	7950.88	261.55	-3108.82	0.30	3119.80	483358.55	568463.18	
10818.00	91.86	275.15	7948.67	269.51	-3203.46	1.32	3214.77	483366.51	568368.54	
10912.00	91.37	274.94	7946.02	277.77	-3297.06	0.57	3308.73	483374.77	568274.94	
11007.00	92.77	274.57	7942.59	285.64	-3391.67	1.52	3403.66	483382.64	568180.33	
11102.00	92.63	274.50	7938.11	293.14	-3486.26	0.16	3498.56	483390.14	568085.74	
11196.00	92.77	274.74	7933.69	300.71	-3579.85	0.30	3592.45	483397.71	567992.15	
11291.00	91.93	275.26	7929.79	308.98	-3674.41	1.04	3687.37	483405.98	567897.59	
11385.00	91.09	275.62	7927.31	317.89	-3767.95	0.97	3781.33	483414.89	567804.05	
11480.00	90.74	275.34	7925.80	326.96	-3862.51	0.47	3876.31	483423.96	567709.49	
11575.00	91.65	275.27	7923.82	335.74	-3957.08	0.96	3971.28	483432.74	567614.92	
11669.00	90.11	274.21	7922.37	343.51	-4050.74	1.99	4065.26	483440.51	567521.26	
11764.00	90.46	273.67	7921.90	350.03	-4145.52	0.68	4160.25	483447.03	567426.48	
11859.00	90.53	272.81	7921.08	355.40	-4240.36	0.91	4255.22	483452.40	567331.64	
11954.00	90.25	271.81	7920.43	359.23	-4335.28	1.09	4350.14	483456.23	567236.72	
12048.00	91.02	272.65	7919.39	362.89	-4429.20	1.21	4444.04	483459.89	567142.80	
12133.00	91.02	271.66	7917.88	366.08	-4514.13	1.16	4528.95	483463.08	567057.87	Last Wft Svy
12196.00	91.02	271.66	7916.76	367.91	-4577.09	0.00	4591.85	483464.91	566994.91	Proj to Bit

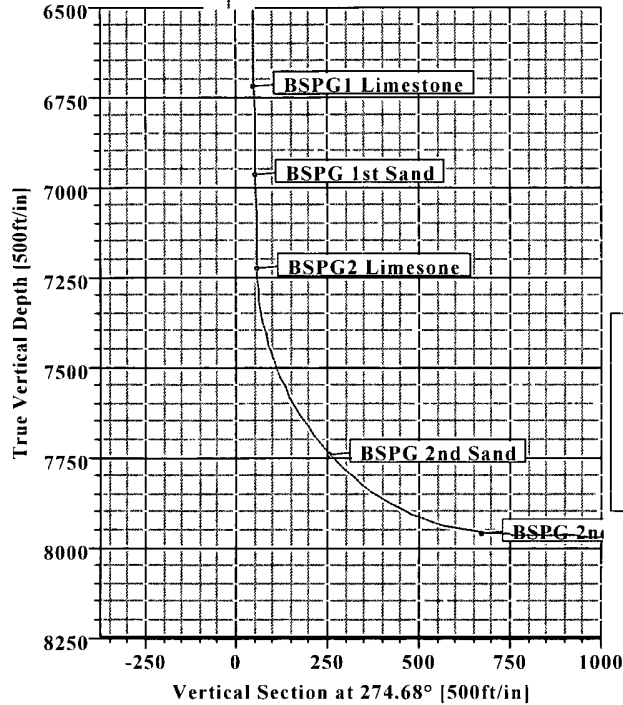
Annotation

MD ft	TVD ft	
400.00	399.94	Tie on Gyro
503.00	502.91	First Wft Svy
12133.00	7917.88	Last Wft Svy
12196.00	7916.76	Proj to Bit



Swearingen A Fee Com 3H Eddy Co, NM

KB ELEV: 3039.10
GL ELEV: 3014.10



FIELD DETAILS

Eddy Co, NM (Nad 27)

Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

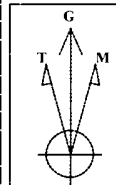
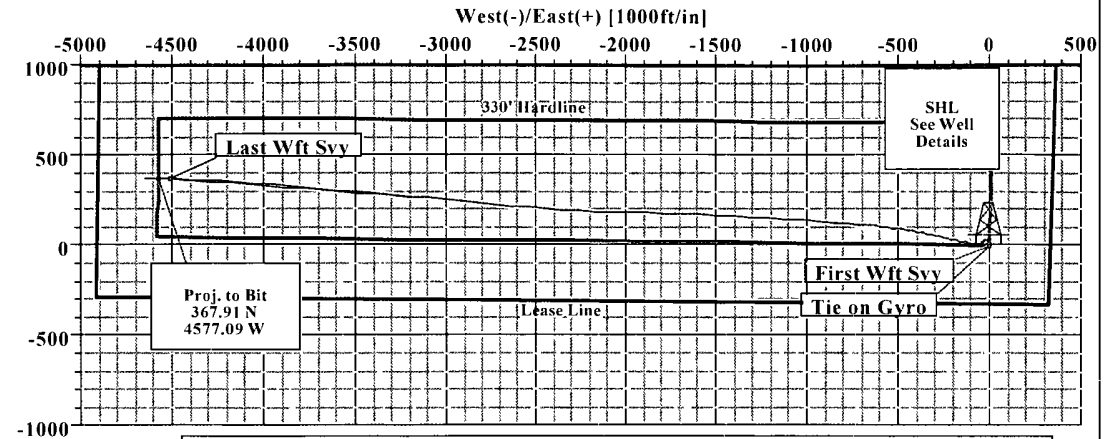
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Swearingen A Fee Com 3H

Site Centre Northing: 483097.00
Easting: 571572.00

Ground Level: 3014.10
Positional Uncertainty: 0.00
Convergence: 0.12



Azimuths to Grid North
True North: -0.12°
Magnetic North: 7.61°

Magnetic Field
Strength: 48558nT
Dip Angle: 60.17°
Date: 5/1/2012
Model: IGRF2010

Total Correction to Grid North: 7.6

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	10785.00	91.00	274.46	7949.90	266.28	-3170.63	0.00	0.00	3181.79	
2	12195.73	93.87	274.32	7890.00	374.20	-4575.80	0.20	-2.72	4591.08	PBHL #3

WELL DETAILS

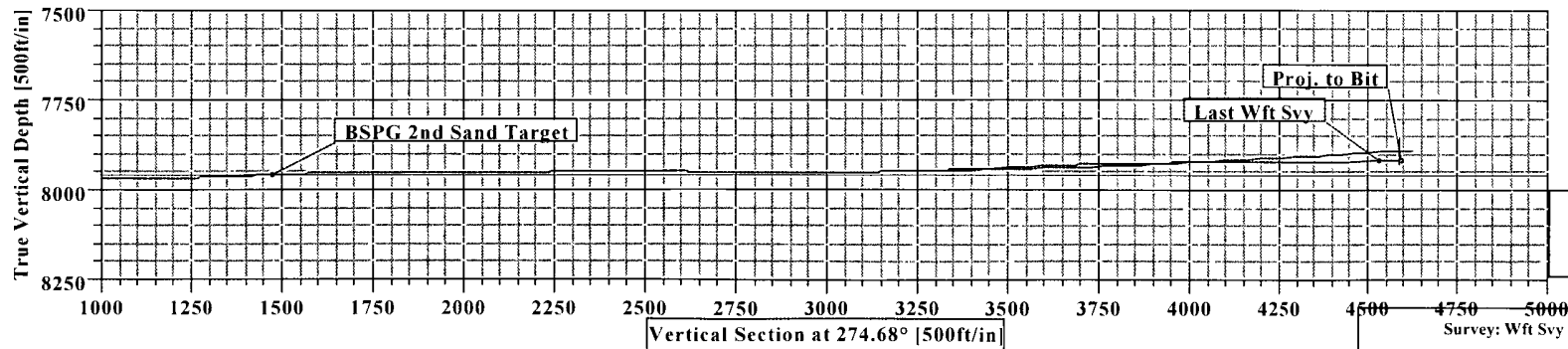
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Swearingen A Fee Com 3H	0.00	0.00	483097.00	571572.00	32°19'40.573N	104°06'05.846W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL #3	7890.00	374.20	-4575.80	483471.20	566996.20	Point

Survey: Wft Svy (Swearingen A Fee Com 3H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
154	12196.00	91.02	271.66	7916.76	367.91	-4577.09	0.00	0.00	4591.85



LEGEND

Swearingen A Fee Com 3H, I, Plan #4
Wft Svy

Survey: Wft Svy (Swearingen A Fee Com 3H/1)

Created By: Patrick Rudolph

Date: 6/25/2012