

30-015-39407

OCCIDENTAL PERMIAN LTD.

Hay Hollow Bone Spring
Eddy County, NM
Devon "8" Fee #1H
VH - Job #32K11111091

Survey: Gyro

SDI Standard Survey Report

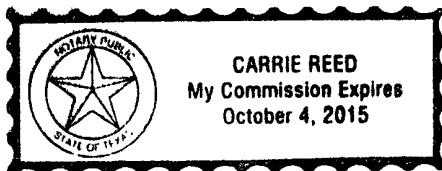
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 12th of December, 2011.

Carrie Reed

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 Devon "8" Fee #1H
Project:	Hay Hollow Bone Spring	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	Devon "8" Fee #1H	North Reference:	Grid
Wellbore:	VH - Job #32K11111091	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K11111091	Database:	EDM-Regulatory

Project	Hay Hollow Bone Spring		
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:	418,024 62 usft
From:	Lat/Long	Easting:	571,702 19 usft
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16"
		Latitude:	32° 8' 56 596 N
		Longitude:	104° 6' 5 964 W
		Grid Convergence:	0 12 °

Well	Devon "8" Fee #1H, Directional (Weatherford)		
Well Position	+N/-S	0 0 usft	Northing: 418,024 62 usft
	+E/-W	0 0 usft	Easting: 571,702 19 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	usft
		Latitude:	32° 8' 56 596 N
		Longitude:	104° 6' 5 964 W
		Ground Level:	0 0 usft

Wellbore	VH - Job #32K11111091		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	11/10/2011	7 77
			Dip Angle
			(°)
			60 01
			Field Strength
			(nT)
			48,497

Design	VH - Job #32K11111091		
Audit Notes:			
Version:	1 0	Phase:	ACTUAL
		Tie On Depth:	0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0 0	0 0	0 0
			Direction
			(°)
			274 91

Survey Program	Date 12/30/2011		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
44 9	393 0	Gyro (VH - Job #32K11111091)	Keeper
			Description
			Keeper Surface Readout

Survey			
Measured Depth	Inclination	Azimuth	True Vertical
(usft)	(°)	(°)	Depth
0 0	0 00	0 00	0 0
44 9	0 21	321 46	44 9
136 4	0 05	325 14	136 4
228 9	0 16	293 45	228 9
317 8	0 31	287 02	317 8
393 0	0 54	250 19	393 0
			North/South
			(usft)
			0 0
			East/West
			(usft)
			0 0
			Closure Azimuth
			(°)
			0 00
			Closure Distance
			(usft)
			0 1
			0 3
			0 4
			0 8
			1 2



Project: Hay Hollow Bone Spring
Eddy County, NM
Well: Devon "8" Fee #1H
Wellbore: VH - Job #32K11111091
Design: VH - Job #32K11111091

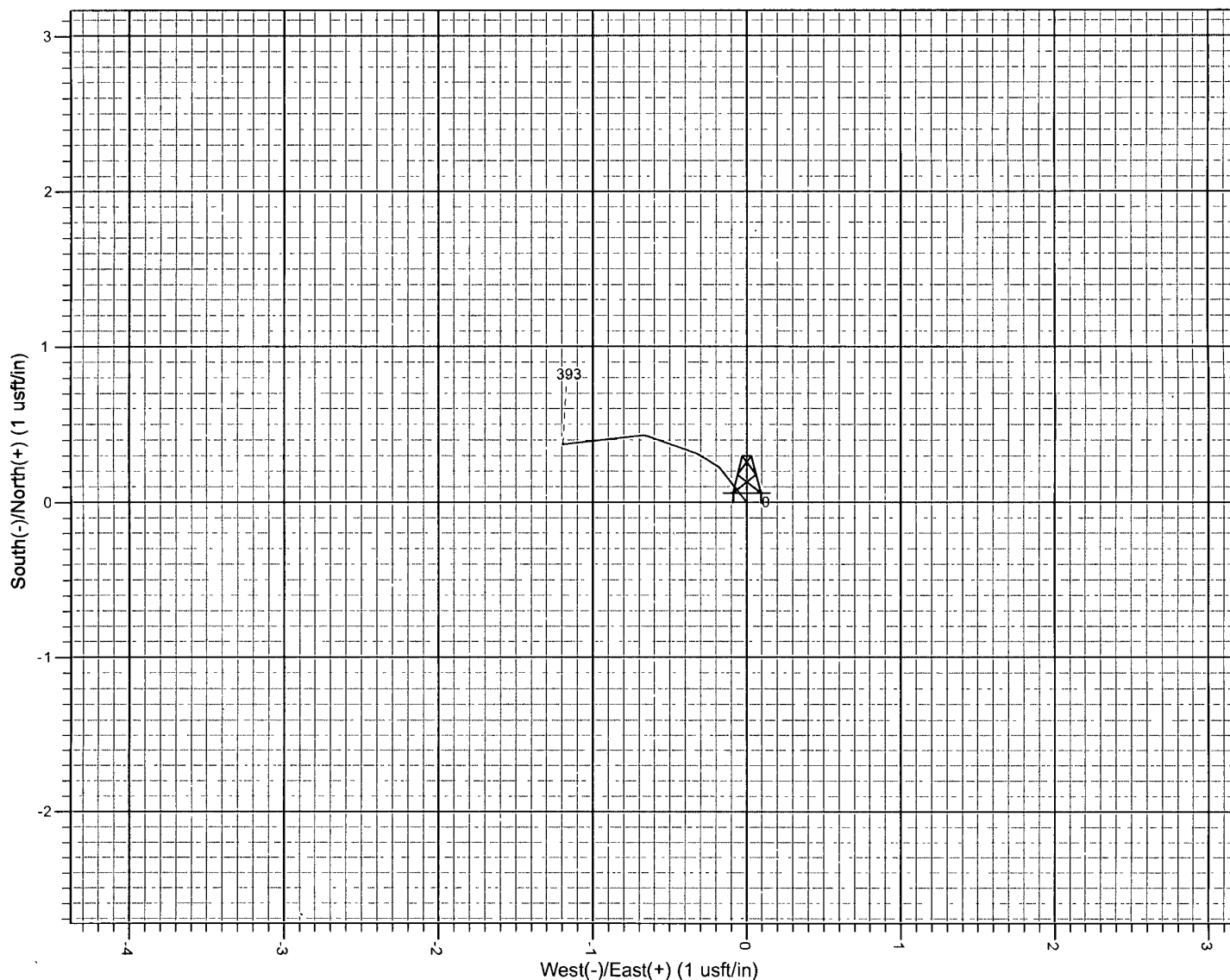


Azimuths to Grid North
True North -0.12°
Magnetic North 7.65°

Magnetic Field
Strength 48496.6 nT
Dip Angle 60.01°
Date 11/10/2011
Model IGRF2010

WELL DETAILS: Devon "8" Fee #1H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	418024.62	571702.19	32° 8' 56.596 N	104° 6' 5.964 W	



PROJECT DETAILS: Hay Hollow Bone Spring
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 8' 56.596 N
Longitude: 104° 6' 5.964 W
Positional Uncertainty: 0.0
Convergence: 0.12
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: December 14, 2011

Attention: Douglas Muir

Re: Occidental Permian Ltd
Well: Devon 8 Fee #1H
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:

Pilot

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
David Latch MWD Supervisor	1H	415' MD 8590' MD	11/10/2011 11/25/2011	Measurement While Drilling

Lateral

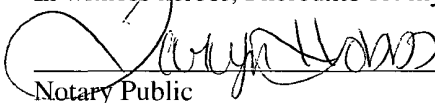
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
David Latch MWD Supervisor	1H	7363' MD 12325' MD	11/29/2011 12/13/2011	Measurement While Drilling

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.

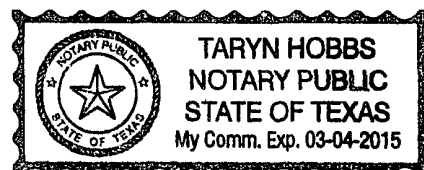
Jesse Aguilar
MWD Coordinator

On this, the 14 day of December, 2011, before me a notary public, the undersigned officer, personally appeared Jesse 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: 12/14/2011	Time: 11:17 24	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well: 1H, Grid North		
Site: Devon 8 Fee #1H	Vertical (TVD) Reference: SITE 3035.3		
Well: 1H	Section (VS) Reference: Well (0.00N,0.00E,274 91Azi)		
Wellpath: Pilot	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 11/15/2011
Company: Weatherford International Ltd	Engineer: Keith Noack
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: Devon 8 Fee #1H		
Site Position:	Northing: 418024 60 ft	Latitude: 32 8 56.596 N
From: Map	Easting: 571702 20 ft	Longitude: 104 6 5.964 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3009 30 ft		Grid Convergence: 0.12 deg

Well: 1H	Slot Name:	
Well Position: +N/-S 0 00 ft	Northing: 418024 60 ft	Latitude: 32 8 56 596 N
+E/-W 0 00 ft	Easting : 571702.20 ft	Longitude: 104 6 5.964 W
Position Uncertainty: 0 00 ft		

Wellpath: Pilot	Drilled From: Lateral		
Current Datum: SITE	Tie-on Depth: 0 00 ft		
Magnetic Data: 9/1/2011	Above System Datum: Mean Sea Level		
Field Strength: 48515 nT	Declination: 7 80 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60 02 deg		
ft	+N/-S	+E/-W	Direction
ft	ft	ft	deg
0.00	0 00	0 00	274 91

Survey											
MD	Incl	Azin	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment	
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	ft	
393.00	0.54	250.19	393.00	0.37	-1.19	0.00	1.22	418024.97	571701.01	Tie on SDI	
415.00	0.56	247.26	415.00	0.30	-1.39	0.15	1.41	418024.90	571700.81	Top Rustler (to	
435.01	0.58	244.77	435.00	0.22	-1.57	0.15	1.58	418024.82	571700.63	Csg	
590.00	0.74	230.02	589.98	-0.76	-3.04	0.15	2.96	418023.84	571699.16	First Wft Svy	
771.00	0.99	233.79	770.96	-2.43	-5.20	0.14	4.97	418022.17	571697.00		
955.00	1.03	223.69	954.94	-4.57	-7.62	0.10	7.20	418020.03	571694.58		
1140.00	1.13	250.04	1139.90	-6.39	-10.49	0.27	9.90	418018.21	571691.71		
1329.00	2.50	310.59	1328.82	-4.35	-15.37	1.15	14.94	418020.25	571686.83		
1518.00	2.12	314.19	1517.66	0.77	-21.00	0.22	20.99	418025.37	571681.20		
1706.00	1.84	323.05	1705.55	5.61	-25.31	0.22	25.70	418030.21	571676.89		
1894.00	3.45	356.76	1893.36	13.67	-27.45	1.16	28.52	418038.27	571674.75		
2083.00	3.47	349.92	2082.01	24.98	-28.77	0.22	30.80	418049.58	571673.43		
2272.00	3.76	324.34	2270.65	35.64	-33.38	0.86	36.31	418060.24	571668.82		
2436.73	4.02	314.39	2435.00	44.07	-40.66	0.44	44.28	418068.67	571661.54	Top Lamar (base	
2468.00	4.08	312.66	2466.19	45.59	-42.26	0.44	46.00	418070.19	571659.94		
2486.85	4.04	312.66	2485.00	46.49	-43.24	0.20	47.06	418071.09	571658.96	Top Delaware	
2501.89	4.01	312.65	2500.00	47.21	-44.02	0.20	47.90	418071.81	571658.18	Csg	
2536.98	3.94	312.65	2535.00	48.86	-45.81	0.20	49.82	418073.46	571656.39	Top Bell Canyon	
2628.00	3.76	312.63	2625.82	53.00	-50.30	0.20	54.65	418077.60	571651.90		
2723.00	2.78	314.82	2720.66	56.73	-54.23	1.04	58.89	418081.33	571647.97		
2816.00	1.74	305.63	2813.59	59.15	-56.98	1.18	61.83	418083.75	571645.22		
2910.00	0.71	296.50	2907.57	60.24	-58.66	1.11	63.60	418084.84	571643.54		
3004.00	0.55	300.00	3001.56	60.72	-59.57	0.17	64.55	418085.32	571642.63		
3099.00	0.62	308.89	3096.56	61.27	-60.36	0.12	65.39	418085.87	571641.84		



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Occidental Permian Ltd. Date: 12/14/2011 Time: 11:17.24 Page: 2
Field: Eddy Co, NM (Nad 27) Co-ordinate(NE) Reference: Well: 1H, Grid North
Site: Devon 8 Fee #1H. Vertical (TVD) Reference: SITE 3035.3
Well: 1H Section (VS) Reference: Well (0.00N,0.00E,274.91Azi)
Wellpath: Pilot 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
3193.00	0.69	297.83	3190.55	61.86	-61.26	0.15	66.33	418086.46	571640.94	
3287.00	0.67	303.93	3284.54	62.43	-62.22	0.08	67.33	418087.03	571639.98	Top Cherry Canyon
3327.46	0.67	298.61	3325.00	62.67	-62.62	0.15	67.75	418087.27	571639.58	
3381.00	0.67	291.57	3378.54	62.94	-63.18	0.15	68.34	418087.54	571639.02	
3475.00	0.81	296.08	3472.53	63.43	-64.29	0.16	69.49	418088.03	571637.91	
3569.00	0.77	293.82	3566.52	63.98	-65.47	0.05	70.70	418088.58	571636.73	
3664.00	0.81	290.16	3661.51	64.47	-66.68	0.07	71.95	418089.07	571635.52	
3758.00	0.32	131.59	3755.51	64.52	-67.11	1.19	72.39	418089.12	571635.09	
3852.00	0.42	142.35	3849.51	64.07	-66.70	0.13	71.94	418088.67	571635.50	
3946.00	0.46	162.66	3943.50	63.44	-66.38	0.17	71.57	418088.04	571635.82	
4040.00	0.46	171.95	4037.50	62.71	-66.21	0.08	71.34	418087.31	571635.99	
4135.00	0.65	297.16	4132.50	62.58	-66.64	1.04	71.75	418087.18	571635.56	
4229.00	0.65	172.22	4226.50	62.29	-67.04	1.23	72.13	418086.89	571635.16	
4323.00	0.74	171.88	4320.49	61.16	-66.88	0.10	71.87	418085.76	571635.32	
4417.00	0.74	170.38	4414.48	59.96	-66.70	0.02	71.58	418084.56	571635.50	
4512.00	0.86	178.00	4509.47	58.65	-66.57	0.17	71.34	418083.25	571635.63	
4532.53	0.70	179.93	4530.00	58.37	-66.56	0.81	71.32	418082.97	571635.64	Top Brushy Canyon
4606.00	0.15	223.55	4603.47	57.85	-66.63	0.81	71.34	418082.45	571635.57	
4701.00	0.45	209.49	4698.47	57.44	-66.90	0.32	71.57	418082.04	571635.30	
4795.00	0.50	215.69	4792.46	56.78	-67.32	0.08	71.93	418081.38	571634.88	
4889.00	0.74	238.84	4886.46	56.13	-68.08	0.36	72.63	418080.73	571634.12	
4984.00	0.77	243.44	4981.45	55.53	-69.17	0.07	73.67	418080.13	571633.03	
5078.00	0.67	236.02	5075.44	54.94	-70.20	0.15	74.64	418079.54	571632.00	
5172.00	0.81	236.23	5169.43	54.27	-71.20	0.15	75.59	418078.87	571631.00	
5267.00	0.92	237.29	5264.42	53.48	-72.40	0.12	76.72	418078.08	571629.80	
5361.00	1.09	199.93	5358.41	52.23	-73.34	0.71	77.54	418076.83	571628.86	
5455.00	1.10	157.23	5452.39	50.56	-73.30	0.85	77.36	418075.16	571628.90	
5548.00	0.85	124.93	5545.38	49.34	-72.39	0.64	76.35	418073.94	571629.81	
5643.00	0.89	79.05	5640.37	49.08	-71.09	0.71	75.03	418073.68	571631.11	
5737.00	0.81	91.41	5734.36	49.20	-69.70	0.21	73.66	418073.80	571632.50	
5831.00	0.96	89.82	5828.35	49.19	-68.25	0.16	72.21	418073.79	571633.95	
5925.00	0.71	104.22	5922.34	49.05	-66.90	0.35	70.85	418073.65	571635.30	
6020.00	0.71	110.98	6017.33	48.69	-65.78	0.09	69.71	418073.29	571636.42	
6114.00	0.77	112.72	6111.32	48.24	-64.65	0.07	68.55	418072.84	571637.55	
6127.68	0.86	105.49	6125.00	48.18	-64.47	0.99	68.36	418072.78	571637.73	Top Bone Spring
6208.00	1.52	83.52	6205.31	48.14	-62.83	0.99	66.72	418072.74	571639.37	
6302.00	1.94	91.06	6299.26	48.25	-60.00	0.51	63.91	418072.85	571642.20	
6396.00	1.21	102.43	6393.23	48.00	-57.44	0.84	61.34	418072.60	571644.76	
6491.00	0.74	119.04	6488.21	47.49	-55.93	0.57	59.79	418072.09	571646.27	
6585.00	0.58	149.84	6582.21	46.78	-55.16	0.41	58.96	418071.38	571647.04	
6680.00	1.00	138.77	6677.20	45.74	-54.37	0.47	58.09	418070.34	571647.83	
6774.00	0.46	223.23	6771.19	44.85	-54.09	1.13	57.73	418069.45	571648.11	
6868.00	0.55	240.14	6865.19	44.35	-54.74	0.18	58.33	418068.95	571647.46	
6963.00	0.74	231.95	6960.18	43.75	-55.62	0.22	59.16	418068.35	571646.58	
7057.00	1.14	213.40	7054.17	42.59	-56.61	0.53	60.05	418067.19	571645.59	
7092.84	1.06	205.87	7090.00	42.00	-56.95	0.46	60.34	418066.60	571645.25	1st BSPG Sd
7151.00	0.98	191.54	7148.15	41.02	-57.28	0.46	60.59	418065.62	571644.92	
7245.00	1.57	203.74	7242.13	39.06	-57.96	0.69	61.09	418063.66	571644.24	
7340.00	0.82	241.05	7337.11	37.54	-59.08	1.10	62.08	418062.14	571643.12	
7434.00	1.65	24.83	7431.10	38.44	-59.10	2.51	62.18	418063.04	571643.10	
7528.00	1.18	23.89	7525.07	40.55	-58.14	0.50	61.40	418065.15	571644.06	
7622.00	0.55	277.89	7619.06	41.50	-58.20	1.52	61.54	418066.10	571644.00	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Occidental Permian Ltd.
Field: Eddy Co. NM (Nad 27)
Site: Devon 8 Fee #1H
Well: 1H
Wellpath: Pilot

Date: 12/14/2011 Time: 11:17:24 Page: 3
Co-ordinate(NE) Reference: Well: 1H, Grid North
Vertical (TVD) Reference: SITE 3035.3
Section (VS) Reference: Well (0.00N,0.00E,274 91Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

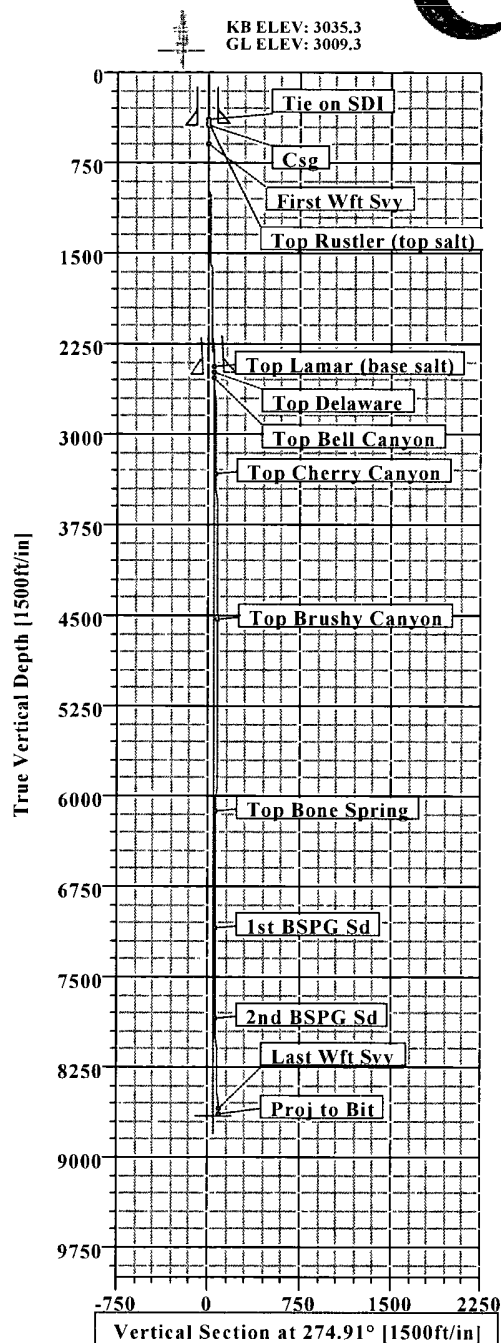
Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7717.00	0.39	260.31	7714.06	41.51	-58.97	0.22	62.30	418066.11	571643.23	
7811.00	1.02	300.57	7808.05	41.88	-60.00	0.81	63.37	418066.48	571642.20	
7852.96	1.26	280.47	7850.00	42.15	-60.78	1.10	64.16	418066.75	571641.42	2nd BSPG Sd
7905.00	1.69	265.56	7902.03	42.20	-62.11	1.10	65.49	418066.80	571640.09	
7999.00	1.55	256.08	7995.99	41.79	-64.72	0.32	68.06	418066.39	571637.48	
8093.00	1.67	256.14	8089.95	41.15	-67.29	0.13	70.56	418065.75	571634.91	
8187.00	1.81	250.90	8183.91	40.34	-70.02	0.23	73.21	418064.94	571632.18	
8282.00	2.02	256.09	8278.86	39.44	-73.06	0.29	76.17	418064.04	571629.14	
8376.00	2.42	268.72	8372.79	39.00	-76.65	0.67	79.71	418063.60	571625.55	
8471.00	2.24	265.94	8467.71	38.83	-80.51	0.22	83.54	418063.43	571621.69	
8565.00	2.17	267.62	8561.64	38.62	-84.12	0.10	87.12	418063.22	571618.08	
8590.00	2.25	268.00	8586.62	38.58	-85.08	0.33	88.07	418063.18	571617.12	Last Wft Svy
8651.00	2.25	268.00	8647.57	38.50	-87.48	0.00	90.45	418063.10	571614.72	Proj to Bit

Annotation

MD ft	TVD ft	
393.00	393.00	Tie on SDI
590.00	589.98	First Wft Svy
8590.00	8586.62	Last Wft Svy
8651.00	8647.57	Proj to Bit

Devon 8 Fee #1H
Eddy Co, NM



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	2083.00	3.47	349.92	2082.01	24.98	-28.77	0.00	0.00	30.80	
2	2184.86	3.47	315.76	2183.70	30.22	-31.46	2.00	-107.04	33.93	
3	2458.84	3.47	315.76	2457.17	42.10	-43.03	0.00	0.00	46.48	
4	2805.88	0.00	0.00	2804.00	49.63	-50.36	1.00	180.00	54.42	
5	8651.88	0.00	0.00	8650.00	49.63	-50.36	0.00	0.00	54.42	Pbhl Pilot

WELL DETAILS					
Name+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
1H	0.00	0.00	418024.60	571702.20	32°08'56.596N 104°06'05.964W

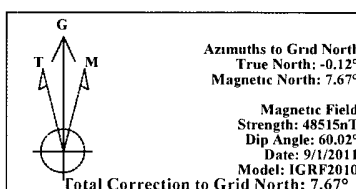
TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl Pilot	8650.00	49.63	-50.36	418074.23	571651.84	Point

Survey: Wft Svy (1H/Pilot)									
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
78	8651.00	2.25	268.00	8647.57	38.50	-87.48	0.00	180.00	90.45

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



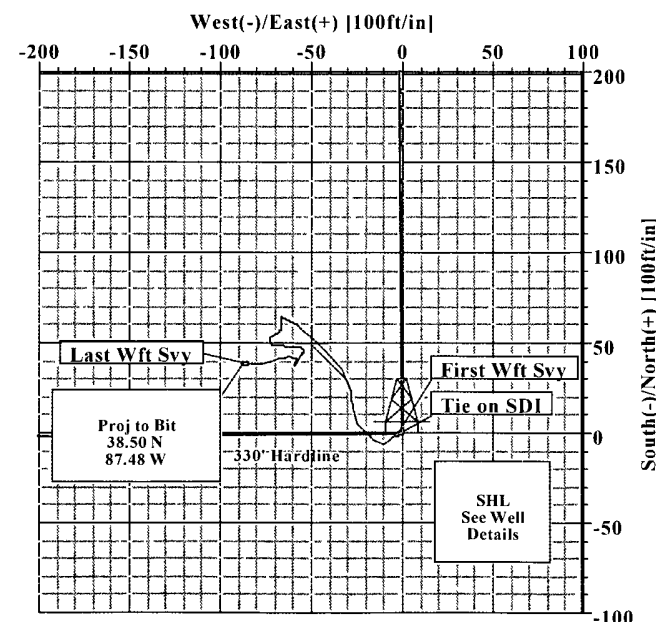
SITE DETAILS
Devon 8 Fee #1H

Site Centre Northing: 418024.60
Easting: 571702.20

Ground Level: 3009.30
Positional Uncertainty: 0.00
Convergence: 0.12

LEGEND

- 1H, Pilot, Gyro Svy
- 1H, Pilot, Plan #3
- Pilot
- Wft Svy



Survey: Wft Svy (1H/Pilot)
Created By: Keith Noack
Date: 12/14/2011



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 12/14/2011	Time: 11:11:19	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference: Well, 1H, Grid North		
Site: Devon 8 Fee #1H	Vertical (TVD) Reference: SITE 3035.3		
Well: 1H	Section (VS) Reference: Well (0.00N,0.00E,274.91Azi)		
Wellpath: Lateral	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 12/2/2011
Company: Weatherford International Ltd.	Engineer: Keith Noack
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: Devon 8 Fee #1H		
Site Position:	Northing: 418024 60 ft	Latitude: 32 8 56 596 N
From: Map	Easting: 571702 20 ft	Longitude: 104 6 5.964 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3009 30 ft		Grid Convergence: 0.12 deg

Well: 1H	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 418024.60 ft
+E/-W 0.00 ft	Easting : 571702.20 ft
Position Uncertainty: 0.00 ft	Latitude: 32 8 56 596 N
	Longitude: 104 6 5.964 W

Wellpath: Lateral	Drilled From: Pilot
Current Datum: SITE	Tie-on Depth: 7340.00 ft
Magnetic Data: 9/1/2011	Above System Datum: Mean Sea Level
Field Strength: 48515 nT	Declination: 7.80 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60 02 deg
ft	+N/-S
	ft
0 00	0 00
	0 00
	274.91

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
2530 00	3 96	312.65	2528 04	48.53	-45 45	0.00	49 44	418073.13	571656 75	9 5/8"
7340.00	0.82	241 05	7337.11	37.54	-59.08	0 08	62 08	418062.14	571643.12	Tie on Pilot
7363 00	3.68	277 86	7360.09	37.56	-59 96	13 32	62 95	418062 16	571642.24	First Wft Svy
7395 00	7 62	288.06	7391 93	38 36	-62.99	12.66	66.05	418062.96	571639 21	
7426 00	11.27	290.94	7422 50	40 08	-67.78	11.87	70.96	418064 68	571634.42	
7457.00	14 27	293.33	7452.73	42 67	-74.12	9 82	77.50	418067.27	571628 08	
7489.00	17 28	293.87	7483.53	46 16	-82.09	9 42	85 74	418070 76	571620.11	
7520.00	19 87	292 57	7512.91	50 05	-91.16	8.46	95 11	418074.65	571611.04	
7552 00	22 53	289 87	7542 74	54 22	-101 95	8.85	106 22	418078.82	571600.25	
7583.00	24.90	286.68	7571.12	58 11	-113 79	8 69	118.35	418082.71	571588.41	
7614.00	26.87	282 41	7599.01	61.49	-126.89	8 75	131.68	418086 09	571575.31	
7645 00	28.79	278 83	7626 43	64.14	-141 11	8.21	146.08	418088.74	571561 09	
7677 00	30.86	275 39	7654 19	66 10	-156 90	8 39	161.98	418090.70	571545.30	
7708.00	32 19	273.77	7680 62	67 39	-173 05	5.09	178 18	418091.99	571529.15	
7740 00	33 79	274.71	7707 45	68.68	-190 43	5.25	195 61	418093 28	571511.77	
7771.00	35.72	275.55	7732.92	70 26	-208.03	6 41	213.28	418094 86	571494.17	
7803 00	37 98	276.84	7758.53	72.34	-227.10	7 46	232.46	418096 94	571475 10	
7834 00	40 20	277.78	7782.59	74.83	-246 49	7 41	251 99	418099 43	571455 71	
7865.00	42.14	278 48	7805 92	77 72	-266 69	6 43	272.36	418102.32	571435.51	
7897.00	43 73	278.29	7829 35	80 89	-288 25	4.99	294 12	418105 49	571413 95	
7928.00	45.04	277 04	7851.50	83.78	-309.74	5.08	315.78	418108 38	571392.46	
7960 00	46.86	275 15	7873.75	86.22	-332.61	7 10	338.77	418110 82	571369 59	
7991 00	48.87	273 04	7894.55	87.85	-355.54	8.22	361.75	418112.45	571346 66	
8023 00	50.37	271 47	7915.28	88 81	-379.89	5 99	386.10	418113 41	571322 31	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Occidental Permian Ltd.
Field: Eddy Co, NM (Nad 27)
Site: Devon 8 Fee #1H
Well: 1H
Wellpath: Lateral

Date: 12/14/2011 Time: 11:11:19 Page: 2
Co-ordinate(NE) Reference: Well: 1H, Grid North
Vertical (TVD) Reference: SITE 3035 3
Section (VS) Reference: Well (0.00N,0.00E;274.91Azi)
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
8054.00	51.49	271.52	7934.82	89.44	-403.95	3.62	410.12	418114.04	571298.25	
8085.00	53.12	272.55	7953.78	90.31	-428.46	5.88	434.62	418114.91	571273.74	
8117.00	54.55	273.74	7972.66	91.73	-454.26	5.38	460.44	418116.33	571247.94	
8148.00	57.64	275.03	7989.95	93.70	-479.91	10.55	486.16	418118.30	571222.29	
8179.00	60.46	275.45	8005.89	96.13	-506.38	9.17	512.75	418120.73	571195.82	
8211.00	63.11	275.58	8021.02	98.84	-534.44	8.29	540.94	418123.44	571167.76	
8242.00	65.51	275.08	8034.46	101.43	-562.26	7.88	568.87	418126.03	571139.94	
8274.00	68.18	273.64	8047.04	103.67	-591.59	9.31	598.29	418128.27	571110.61	
8305.00	71.75	272.80	8057.66	105.30	-620.66	11.79	627.40	418129.90	571081.54	
8337.00	75.83	273.19	8066.59	106.91	-651.34	12.80	658.10	418131.51	571050.86	
8368.00	79.49	273.49	8073.21	108.67	-681.57	11.84	688.37	418133.27	571020.63	
8399.00	83.02	273.72	8077.93	110.60	-712.14	11.41	719.00	418135.20	570990.06	
8431.00	85.27	273.64	8081.19	112.64	-743.91	7.04	750.82	418137.24	570958.29	
8461.00	87.58	272.90	8083.06	114.35	-773.80	8.08	780.75	418138.95	570928.40	
8493.00	89.90	272.96	8083.76	115.98	-805.75	7.25	812.72	418140.58	570896.45	
8524.00	90.53	272.59	8083.65	117.48	-836.71	2.36	843.70	418142.08	570865.49	
8555.00	91.08	272.74	8083.21	118.93	-867.67	1.84	874.67	418143.53	570834.53	
8650.00	92.97	273.76	8079.86	124.31	-962.46	2.26	969.56	418148.91	570739.74	
8744.00	94.59	274.19	8073.66	130.81	-1056.02	1.78	1063.34	418155.41	570646.18	
8838.00	95.51	273.14	8065.38	136.79	-1149.46	1.48	1156.95	418161.39	570552.74	
8933.00	94.87	273.55	8056.79	142.32	-1243.91	0.80	1251.53	418166.92	570458.29	
9027.00	93.39	273.60	8050.02	148.16	-1337.48	1.58	1345.26	418172.76	570364.72	
9121.00	91.36	274.55	8046.13	154.84	-1431.16	2.38	1439.16	418179.44	570271.04	
9215.00	91.57	274.40	8043.72	162.17	-1524.84	0.27	1533.13	418186.77	570177.36	
9309.00	91.92	274.19	8040.86	169.20	-1618.53	0.43	1627.08	418193.80	570083.67	
9403.00	90.74	274.60	8038.68	176.41	-1712.23	1.33	1721.05	418201.01	569989.97	
9498.00	90.73	274.60	8037.46	184.02	-1806.92	0.01	1816.04	418208.62	569895.28	
9592.00	91.09	274.71	8035.97	191.65	-1900.60	0.40	1910.02	418216.25	569801.60	
9686.00	91.30	274.59	8034.01	199.27	-1994.27	0.26	2004.00	418223.87	569707.93	
9781.00	91.85	274.40	8031.40	206.71	-2088.94	0.61	2098.96	418231.31	569613.26	
9874.00	91.01	275.07	8029.07	214.39	-2181.59	1.16	2191.93	418238.99	569520.61	
9969.00	90.59	275.50	8027.75	223.14	-2276.18	0.63	2286.92	418247.74	569426.02	
10063.00	91.08	275.87	8026.38	232.45	-2369.70	0.65	2380.90	418257.05	569332.50	
10158.00	91.29	275.73	8024.41	242.05	-2464.20	0.27	2475.87	418266.65	569238.00	
10252.00	91.93	275.68	8021.77	251.39	-2557.69	0.68	2569.82	418275.99	569144.51	
10346.00	91.15	274.67	8019.25	259.86	-2651.27	1.36	2663.79	418284.46	569050.93	
10440.00	91.51	274.45	8017.06	267.33	-2744.95	0.45	2757.76	418291.93	568957.25	
10534.00	91.22	273.79	8014.82	274.08	-2838.68	0.77	2851.72	418298.68	568863.52	
10629.00	91.64	273.54	8012.45	280.15	-2933.46	0.51	2946.67	418304.75	568768.74	
10722.00	91.15	273.50	8010.19	285.86	-3026.25	0.53	3039.62	418310.46	568675.95	
10816.00	91.50	273.62	8008.02	291.70	-3120.05	0.39	3133.56	418316.30	568582.15	
10911.00	91.08	273.56	8005.88	297.64	-3214.84	0.45	3228.52	418322.24	568487.36	
11005.00	91.57	273.58	8003.70	303.50	-3308.63	0.52	3322.46	418328.10	568393.57	
11099.00	91.22	273.46	8001.42	309.27	-3402.42	0.39	3416.41	418333.87	568299.78	
11193.00	91.71	273.33	7999.01	314.83	-3496.23	0.54	3510.34	418339.43	568205.97	
11287.00	90.45	273.61	7997.24	320.52	-3590.04	1.37	3604.30	418345.12	568112.16	
11382.00	90.66	273.48	7996.32	326.39	-3684.85	0.26	3699.26	418350.99	568017.35	
11476.00	90.88	273.35	7995.06	331.99	-3778.67	0.27	3793.22	418356.59	567923.53	
11570.00	91.08	273.04	7993.45	337.23	-3872.51	0.39	3887.17	418361.83	567829.69	
11665.00	91.43	272.84	7991.37	342.10	-3967.37	0.42	3982.09	418366.70	567734.83	
11759.00	90.94	273.31	7989.42	347.14	-4061.21	0.72	4076.02	418371.74	567640.99	
11854.00	91.08	273.52	7987.75	352.80	-4156.03	0.27	4170.97	418377.40	567546.17	



Weatherford International Ltd.
WFT Survey Report X & Y's



Weatherford

Company:	Occidental Permian Ltd.	Date:	12/14/2011	Time:	11:11:19	Page:	3
Field:	Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference:	Well: 1H, Grid North				
Site:	Devon 8 Fee #1H	Vertical (TVD) Reference:	SITE 3035.3				
Well:	1H	Section (VS) Reference:	Well (0 00N,0.00E,274.91Azi)				
Wellpath:	Lateral	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
11948.00	91 36	273 37	7985 75	358 45	-4249 84	0 34	4264 92	418383.05	567452 36	
12042.00	91 79	273.17	7983.17	363.81	-4343 65	0.50	4358.85	418388 41	567358.55	
12136.00	92 70	273.51	7979 48	369.28	-4437 41	1 03	4452.74	418393 88	567264.79	
12230.00	92 69	273.88	7975.06	375 33	-4531.12	0.39	4546.61	418399.93	567171 08	
12325 00	92.83	273 63	7970 49	381 55	-4625 80	0.30	4641 48	418406 15	567076 40	Last Wft Svy
12387 00	92 83	273 63	7967 43	385 47	-4687 60	0.00	4703 39	418410.07	567014 60	Proj. to Bit

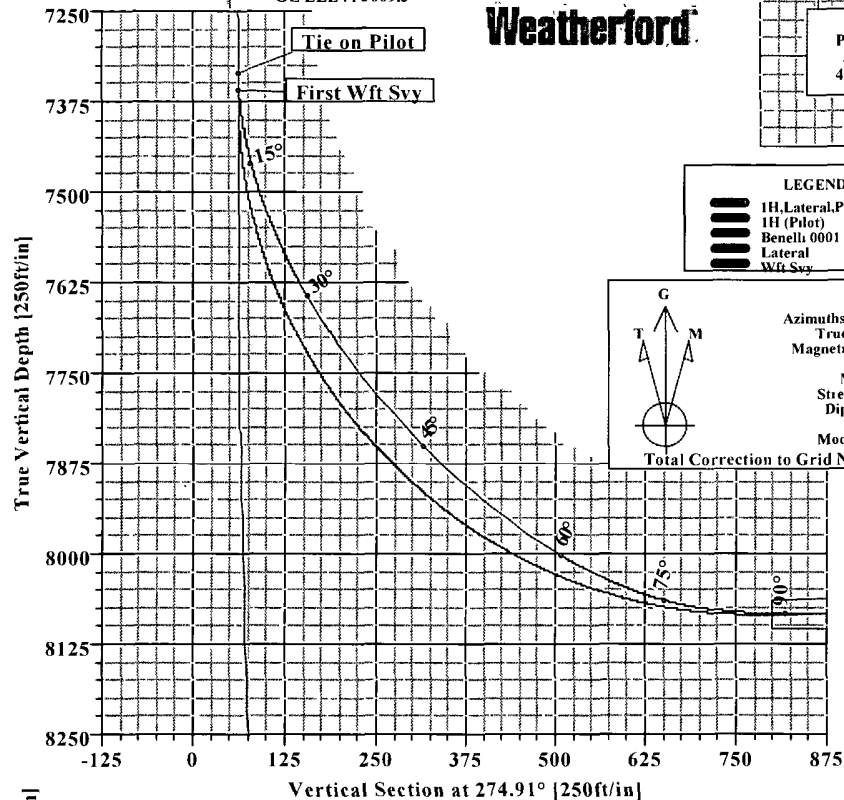
Annotation

MD ft	TVD ft	
7340.00	7337.11	Tie on Pilot
7363.00	7360.09	First Wft Svy
12325.00	7970.49	Last Wft Svy
12387 00	7967.43	Proj. to Bit



Devon 8 Fee #1H
Eddy Co, NM

KB ELEV: 3035.3
GL ELEV: 3009.3



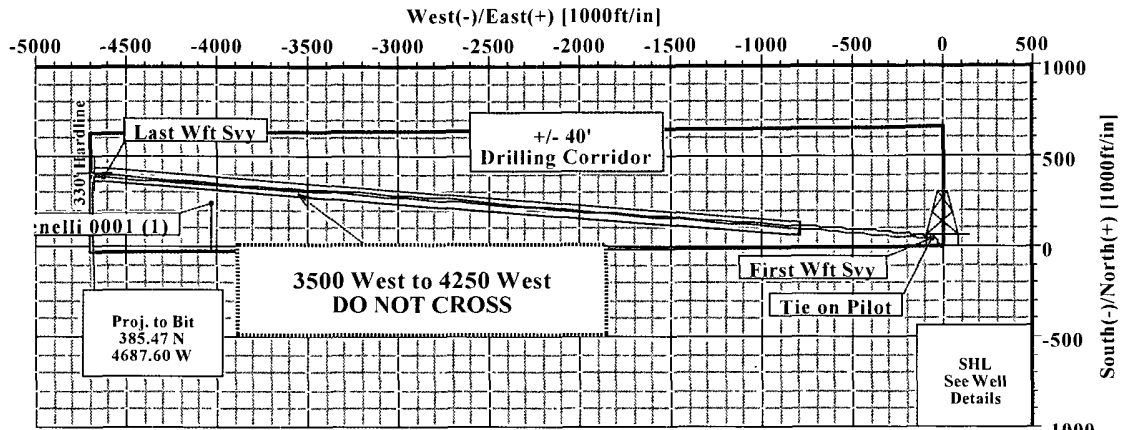
LEGEND

- 1H, Lateral, Plan #12
- 1H (Pilot)
- Benelli 0001 (1)
- Lateral
- Wft Svy

Azimuths to Grid North
True North: -0.12°
Magnetic North: 7.67°

Magnetic Field
Strength: 48515nT
Dip Angle: 60.02°
Date: 9/1/2011
Model: IGRF2010

Total Correction to Grid North: 7.67°



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7340.00	0.82	241.05	7337.11	37.54	-59.08	0.00	0.00	62.08	
2	7374.70	0.36	326.95	7371.81	37.51	-59.36	2.51	155.62	62.35	
3	8516.06	91.53	274.46	8085.00	98.34	-792.14	8.00	-52.48	797.65	
4	12415.89	91.53	274.46	7981.00	401.53	-4678.77	0.00	0.00	4695.97	PBHL

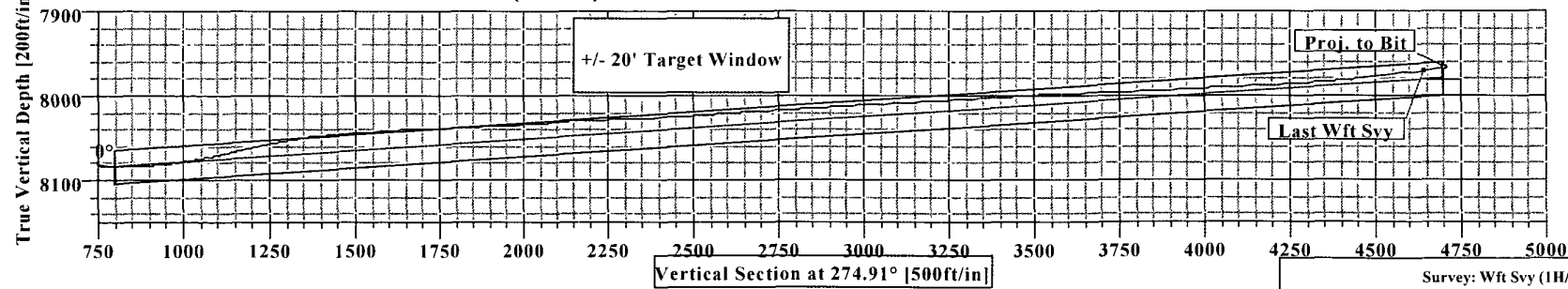
WELL DETAILS							
Name+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
1H	0.00	0.00	418024.60	571702.20	32°08'56.596N	104°06'05.964W	N/A

TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	
PBHL	7981.00	401.53	-4678.77	418426.13	567023.43	Rectangle (3898x80)	

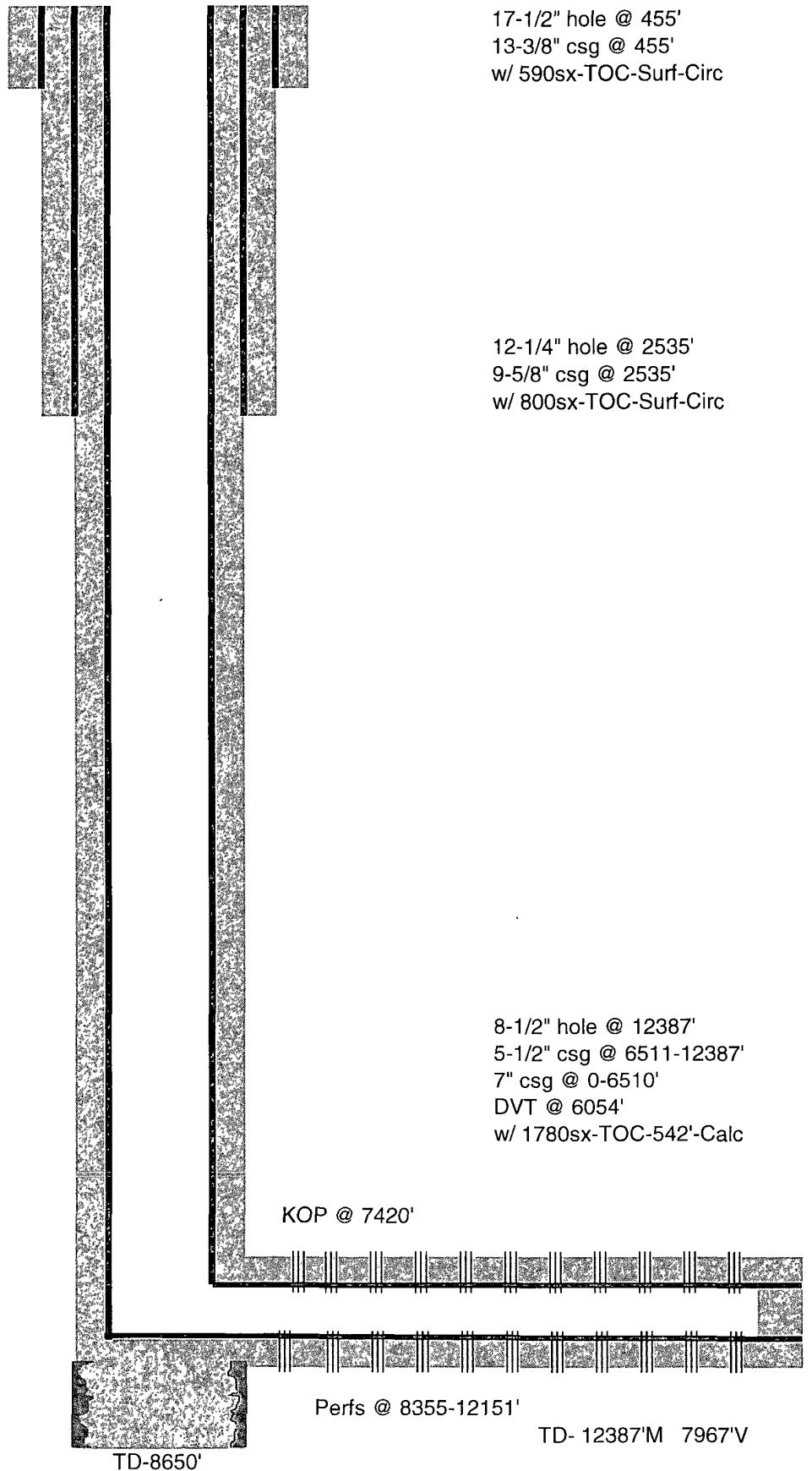
FIELD DETAILS			
Eddy Co, NM (Nad 27)			
Geodetic System:	US State Plane Coordinate System 1927		
Ellipsoid:	NAD27 (Clarke 1866)		
Zone:	New Mexico, Eastern Zone		
Magnetic Model:	IGRF2010		
System Datum:	Mean Sea Level		
Local North:	Grid North		

SITE DETAILS			
Devon 8 Fee #1H			
Site Centre Northing:	418024.60		
Easting:	571702.20		
Ground Level:	3009.30		
Positional Uncertainty:	0.00		
Convergence:	0.12		

Survey: Wft Svy (1H/Lateral)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
81	12387.00	92.83	273.63	7967.43	385.47	-4687.60	0.00	0.00	4703.39	



Occidental Permian LP
Devon 8 Fee #1H
API No. 30-015-39407



280sx @ 7700-7200'
210sx @ 8175-7700'
210sx @ 8650-8175'