

Apache Corporation
303 Veteran Airport Lane, Suite 3000
Midland, Tx 79075

HOBBS OCD

MAY 11 2012

Well:

WEST TATUM UNIT #1H
Lea County, New Mexico

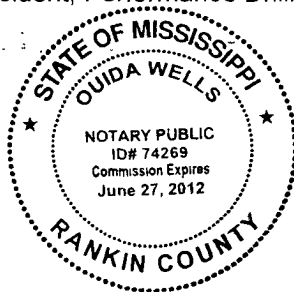
30-025-40336 RECEIVED

330' FSL+ 660' FWL ULM 26-12S-35E

RECORD OF INCLINATION

*11 Measured Depth (Feet)	12 Course Length (Hundreds of Feet)	*13 Angle Of Inclination (Degrees)	14 Displacement per Hundred Feet (Sine of Angle x 100)	15. Course Displacement (Feet)	16 Accumulative Displacement (Feet)
380	380	1	1.75	6.63	6.63
1000	620	0.6	1.05	6.49	13.12
1403	403	0.4	0.70	2.81	15.94
1948	545	0.40	0.70	3.80	19.74
2403	455	0.5	0.87	3.97	23.71
2903	500	0.2	0.35	1.75	25.46
3362	459	0.70	1.22	5.61	31.07
3923	561	0.30	0.52	2.94	34.00
4413	490	0.6	1.05	5.13	39.13
4865	452	0.7	1.22	5.52	44.66
5372	507	0.1	0.17	0.88	45.54
5865	493	0.3	0.52	2.58	48.12
6322	457	0.60	1.05	4.79	52.91
6832	510	0.20	0.35	1.78	54.69
7332	500	0.60	1.05	5.24	59.92
7832	500	0.4	0.70	3.49	63.42
8332	500	0.6	1.05	5.24	68.65
8832	500	0.5	0.87	4.36	73.01
9332	500	0.7	1.22	6.11	79.12
9835	503	0.7	1.22	6.15	85.27
9978	143	0.8	1.40	2.00	87.26

The attached instrument was acknowledged before me on the 18TH day of APRIL, 2012
by Grumpy Farmer, President, Performance Drilling Company LLC



Ouida Wells

MAY 17 2012

HOBBS OCD

MAY 11 2012

RECEIVED

APACHE CORP

Wildcat (Lea County, NM)
Lea County, NM
West Tatum State Unit #1H
VH - Job #32D0112021

30-025-40336
330' FSL + 660' FWL
ULM 26-125-35E

Survey: Gyro

SDI Standard Survey Report

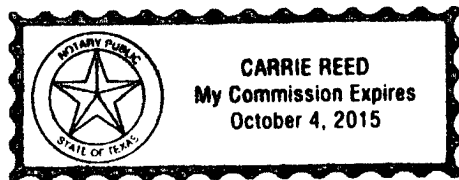
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 17th of February, 2012.

[Signature]

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	APACHE CORP	Local Co-ordinate Reference:	Well West Tatum State Unit #1H
Project:	Wildcat (Lea County,NM)	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	West Tatum State Unit #1H	North Reference:	Grid
Wellbore:	VH - Job #32D0112021	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32D0112021	Database:	EDM-Regulatory

Project	Wildcat (Lea County,NM)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Lea County, NM		
Site Position:		Northing:	763,506 88 usft
From:	Lat/Long	Easting:	800,219 68 usft
Position Uncertainty:	0 0 usft	Slot Radius:	0"
		Latitude:	33° 5' 45 600 N
		Longitude:	103° 29' 16 800 W
		Grid Convergence:	0 46 °

Well	West Tatum State Unit #1H, Directional (Baker)		
Well Position	+N/-S	0 0 usft	Northing: 816,316 96 usft
	+E/-W	0 0 usft	Easting: 663,264 70 usft
Position Uncertainty	0 0 usft	Wellhead Elevation:	usft
		Latitude:	33° 14' 36 150 N
		Longitude:	103° 56' 4 310 W
		Ground Level:	0 0 usft

Wellbore	VH - Job #32D0112021				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/7/2012	7 76	61 05	49,158

Design	VH - Job #32D0112021			
Audit Notes:				
Version:	1 0	Phase:	ACTUAL	Tie On Depth: 0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0 0	0 0	0 0	263 26

Survey Program	Date	2/15/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100 0	9,928 0	Gyro (VH - Job #32D0112021)	Keeper	Keeper Gyro

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 0	
100 0	0 16	84 92	100 0	0 0	0 1	84 92	0 1	
200 0	0 15	15 79	200 0	0 2	0 3	64 35	0 3	
300 0	0 14	81 23	300 0	0 3	0 5	57 87	0 6	
400 0	0 49	56 62	400 0	0 5	0 9	59 92	1 1	
476 6	0 37	74 23	476 6	0 8	1 5	61 37	1 7	
573 0	0 41	72 19	573 0	1 0	2 1	64 70	2 3	
667 3	0 29	79 30	667 3	1 1	2 6	66 78	2 9	
763 6	0 16	114.31	763 6	1 1	3 0	69 49	3 2	
858 9	0 18	33.94	858 9	1 2	3 2	69 60	3 4	
954 2	0 16	359 93	954 2	1 5	3 3	66.23	3 6	
1,049 6	0 26	352 70	1,049 6	1 8	3 3	61 16	3 7	

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Site:	Lea County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	West Tatum State Unit #1H	North Reference:	Grid
Wellbore:	VH - Job #32D0112021	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32D0112021	Database:	EDM-Regulatory

Survey.							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,145.9	0.29	170	1,145.9	2.3	3.2	55.16	4.0
1,241.2	0.26	343.87	1,241.2	2.7	3.2	49.69	4.2
1,337.5	0.23	352.39	1,337.5	3.1	3.1	44.97	4.4
1,432.8	0.28	105.67	1,432.8	3.2	3.3	45.60	4.6
1,528.2	0.43	15.62	1,528.2	3.5	3.6	45.87	5.1
1,623.5	0.44	12.21	1,623.5	4.2	3.8	42.00	5.7
1,719.8	0.32	26.26	1,719.8	4.8	4.0	39.65	6.3
1,814.1	0.10	13.24	1,814.1	5.1	4.1	38.80	6.6
1,910.4	0.19	270.83	1,910.4	5.2	4.0	37.39	6.6
2,006.8	0.35	266.79	2,006.8	5.2	3.5	34.18	6.3
2,102.1	0.49	267.43	2,102.1	5.2	2.8	28.76	5.9
2,197.4	0.40	258.57	2,197.4	5.1	2.1	22.49	5.5
2,293.7	0.42	298.28	2,293.7	5.2	1.5	15.78	5.4
2,389.0	0.40	281.38	2,389.0	5.4	0.8	8.73	5.5
2,484.4	0.42	333.73	2,484.4	5.8	0.4	3.47	5.8
2,580.7	0.41	312.88	2,580.7	6.4	-0.1	359.48	6.4
2,676.0	0.44	329.12	2,676.0	6.9	-0.5	355.90	6.9
2,771.3	0.39	334.03	2,771.3	7.5	-0.8	353.73	7.5
2,867.6	0.23	336.04	2,867.6	8.0	-1.0	352.52	8.0
2,964.0	0.17	347.99	2,964.0	8.3	-1.2	352.07	8.4
3,059.3	0.15	325.93	3,059.3	8.5	-1.3	351.64	8.6
3,154.6	0.08	67.52	3,154.6	8.7	-1.3	351.71	8.8
3,250.9	0.28	62.13	3,250.9	8.8	-1.0	353.56	8.9
3,346.2	0.37	77.41	3,346.2	9.0	-0.5	356.90	9.0
3,442.6	0.45	60.58	3,442.6	9.2	0.1	0.91	9.2
3,537.9	0.42	82.56	3,537.8	9.5	0.8	4.95	9.5
3,633.2	0.40	46.89	3,633.1	9.7	1.4	8.24	9.8
3,728.5	0.34	33.92	3,728.4	10.2	1.8	10.07	10.4
3,824.8	0.27	41.58	3,824.7	10.6	2.1	11.31	10.8
3,919.2	0.32	52.70	3,919.1	10.9	2.5	12.77	11.2
4,015.5	0.16	74.90	4,015.4	11.1	2.8	14.23	11.5
4,111.8	0.17	109.28	4,111.7	11.1	3.1	15.52	11.5
4,207.1	0.16	112.83	4,207.0	11.0	3.3	16.88	11.5
4,302.4	0.21	120.68	4,302.3	10.9	3.6	18.39	11.5
4,398.8	0.17	160.04	4,398.7	10.6	3.8	19.71	11.3
4,493.1	0.32	199.11	4,493.0	10.3	3.8	20.20	10.9
4,588.4	0.50	210.70	4,588.3	9.7	3.5	19.80	10.3
4,684.7	0.48	218.80	4,684.6	9.0	3.0	18.53	9.5
4,779.0	0.44	213.34	4,778.9	8.4	2.6	17.02	8.8
4,875.4	0.45	224.99	4,875.3	7.8	2.1	15.03	8.1
4,971.7	0.48	230.71	4,971.6	7.3	1.5	11.75	7.4
5,066.0	0.40	215.17	5,065.9	6.8	1.0	8.57	6.8
5,162.3	0.33	211.92	5,162.2	6.2	0.7	6.19	6.3
5,257.6	0.27	223.77	5,257.5	5.8	0.4	3.68	5.9

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Well:	West Tatum State Unit #1H	North Reference:	Grid
Wellbore:	VH - Job #32D0112021	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32D0112021	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
5,354 0	0 26	233 96	5,353 9	5 6	0 0	0 44	5 6	
5,449 3	0 17	205 61	5,449 2	5 3	-0 2	357 91	5 3	
5,544 6	0 23	208 41	5,544 5	5 0	-0 3	356 05	5 0	
5,640 9	0 24	206 26	5,640 8	4 7	-0 5	353 54	4 7	
5,735 2	0 32	260 08	5,735 1	4 4	-0 9	348 84	4 5	
5,832 6	0 29	279 22	5,832 5	4 4	-1 4	342 61	4 6	
5,926 9	0 33	261 53	5,926 8	4 4	-1 9	336 86	4 8	
6,023 2	0 40	249 64	6,023 1	4 3	-2 5	329 83	4 9	
6,119 5	0 36	250 22	6,119 4	4 0	-3 1	322 72	5 1	
6,215 8	0 35	263 90	6,215 7	3 9	-3 7	316 93	5 4	
6,310 2	0 30	271 58	6,310 1	3 9	-4 2	312 85	5 7	
6,406 5	0 27	249 09	6,406 4	3 8	-4 7	309 33	6 0	
6,501 8	0 33	252 94	6,501 7	3 7	-5 1	305 47	6 3	
6,597 1	0 48	252 19	6,597 0	3 4	-5 8	300 88	6 7	
6,693 4	0 58	243 96	6,693 3	3 1	-6 6	295 28	7 3	
6,787 8	0 60	248 87	6,787 7	2 7	-7 5	290 01	8 0	
6,883 1	0 55	247 71	6,883 0	2 4	-8 4	285 81	8 7	
6,978 4	0 44	252 81	6,978 3	2 1	-9 1	282 87	9 4	
7,074 7	0 46	253 81	7,074 6	1 9	-9 9	280 74	10 0	
7,169 0	0 63	254 71	7,168 9	1 6	-10 7	278 63	10 9	
7,265 4	0 54	257 76	7,265 3	1 4	-11 7	276 80	11 8	
7,360 7	0 67	253 34	7,360 6	1 1	-12 7	275 14	12 7	
7,456 0	0 58	254 15	7,455 9	0 8	-13 7	273 55	13 7	
7,550 3	0 64	264 00	7,550 2	0 7	-14 6	272 59	14 7	
7,646 6	0 49	286 74	7,646 4	0 7	-15 6	272 66	15 6	
7,743 0	0 31	315 79	7,742 8	1 0	-16 1	273 65	16 2	
7,837 3	0 29	330 86	7,837 1	1 4	-16 4	274 94	16 5	
7,933 6	0 24	347 74	7,933 4	1 8	-16 6	276 29	16 7	
8,028 9	0 19	12 80	8,028 7	2 2	-16 6	277 48	16 7	
8,124 2	0 26	22 59	8,124 0	2 5	-16 5	278 74	16 7	
8,219 6	0 22	29 63	8,219 4	2 9	-16 3	280 05	16 6	
8,315 9	0 16	39 02	8,315 7	3 2	-16 1	281 07	16 4	
8,410 2	0 07	343 05	8,410 0	3 3	-16 1	281 65	16 4	
8,506 5	0 14	284 16	8,506 3	3 4	-16 2	281 85	16 6	
8,602 8	0 13	275 54	8,602 6	3 4	-16 4	281 83	16 8	
8,697 2	0 14	229 21	8,697 0	3 4	-16 6	281 48	17 0	
8,793 5	0 16	230 24	8,793 3	3 2	-16 8	280 81	17 1	
8,889 8	0 29	226 17	8,889 6	3 0	-17 1	279 81	17 3	
8,984 1	0 37	195 84	8,983 9	2 5	-17 3	278 20	17 5	
9,080 4	0 44	171 30	9,080 2	1 8	-17 4	276 03	17 5	
9,176 8	0 55	125 42	9,176 6	1 2	-16 9	274 05	17 0	
9,272 1	0 49	114 61	9,271 9	0 8	-16 2	272 70	16 2	
9,368 4	0 45	112 81	9,368 2	0 4	-15 5	271 65	15 5	
9,463 7	0 40	123 04	9,463 5	0 1	-14 9	270 47	14 9	

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SDI Standard Survey Report



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Project:	Wildcat (Lea County,NM)	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	West Tatum State Unit #1H	North Reference:	Grid
Wellbore:	VH - Job #32D0112021	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32D0112021	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
9,559 0	0 32	128 18	9,558 8	-0 2	-14 4	269 10	14 4
9,654 4	0 34	130 65	9,654 2	-0 6	-13 9	267 64	14 0
9,750 7	0 23	133 53	9,750 5	-0 9	-13 6	266 24	13 6
9,846 0	0 23	153 15	9,845 8	-1 2	-13 4	264 88	13 4
9,928 0	0 32	182 43	9,927 8	-1 6	-13 3	263 26	13 4



Proje Wildcat (Lea County,NM)
Lea County, NM
Well West Tatum State Unit #1H
Wellbore: VH - Job #32D0112021
Design: VH - Job #32D0112021



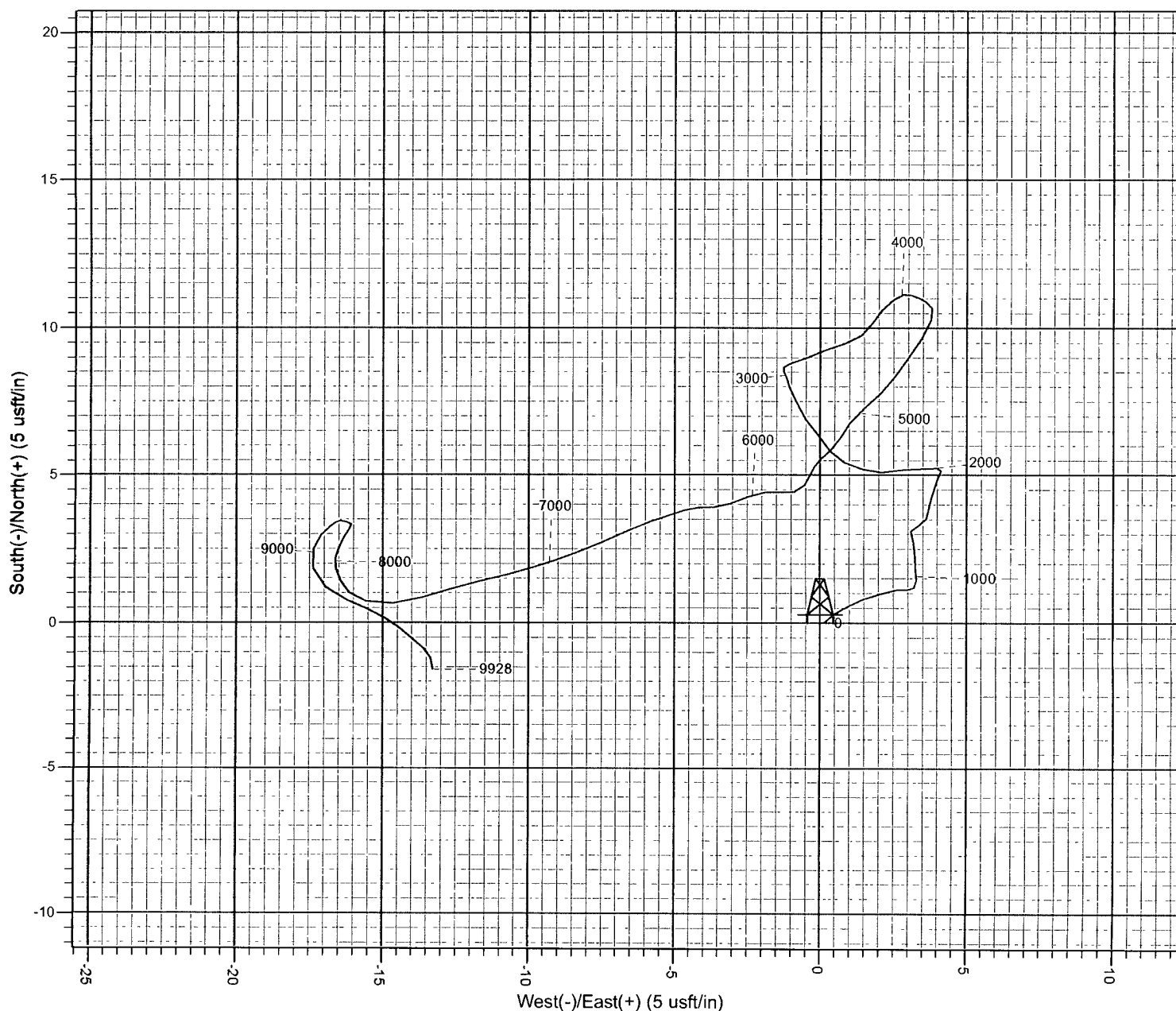
Azimuths to Grid North
True North -0 22°
Magnetic North 7 55°

Magnetic Field
Strength: 49158 3snT
Dip Angle 61 05°
Date 1/7/2012
Model IGRF2010

WELL DETAILS: West Tatum State Unit #1H
WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	816316.96	663264 70	33° 14' 36 150 N	103° 56' 4.310 W	



PROJECT DETAILS: Wildcat (Lea County,NM)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 33° 5' 45 600 N
Longitude: 103° 29' 16.800 W
Positional Uncertainty: 0 0
Convergence: 0.46
Local North: Grid