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NOV 07 2014

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Scientific Drilling

SWEPI LP

Curry County, NM

Stovall

Stovall 13-1

30-009-20022

OH

Design: OH

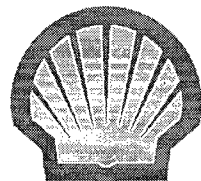
Standard Survey Report

07 June, 2011

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

Notarized this date _____ of _____, 2011.

Notary Signature
County of Natrona
State of Wyoming



DEC 09 2014



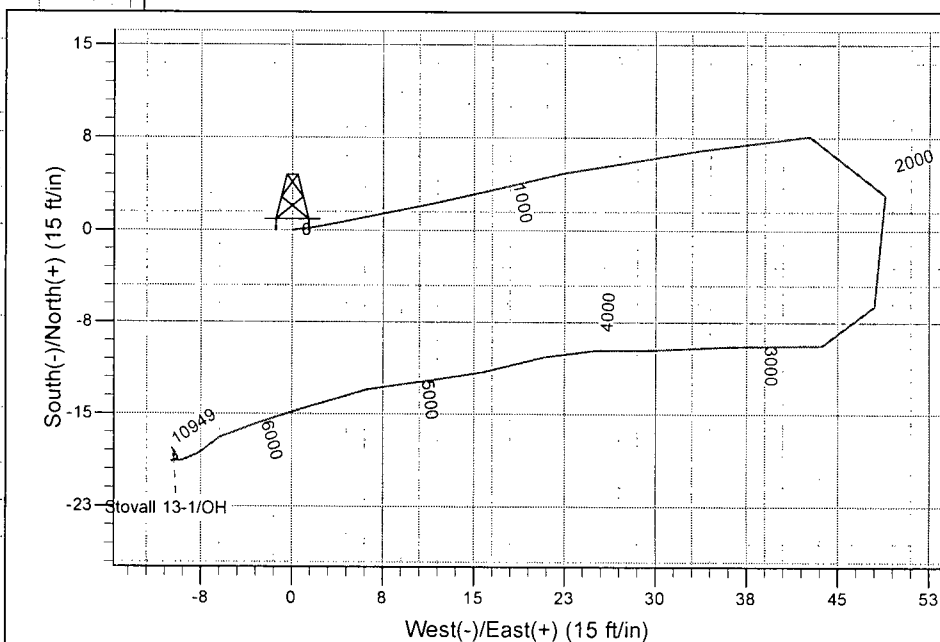
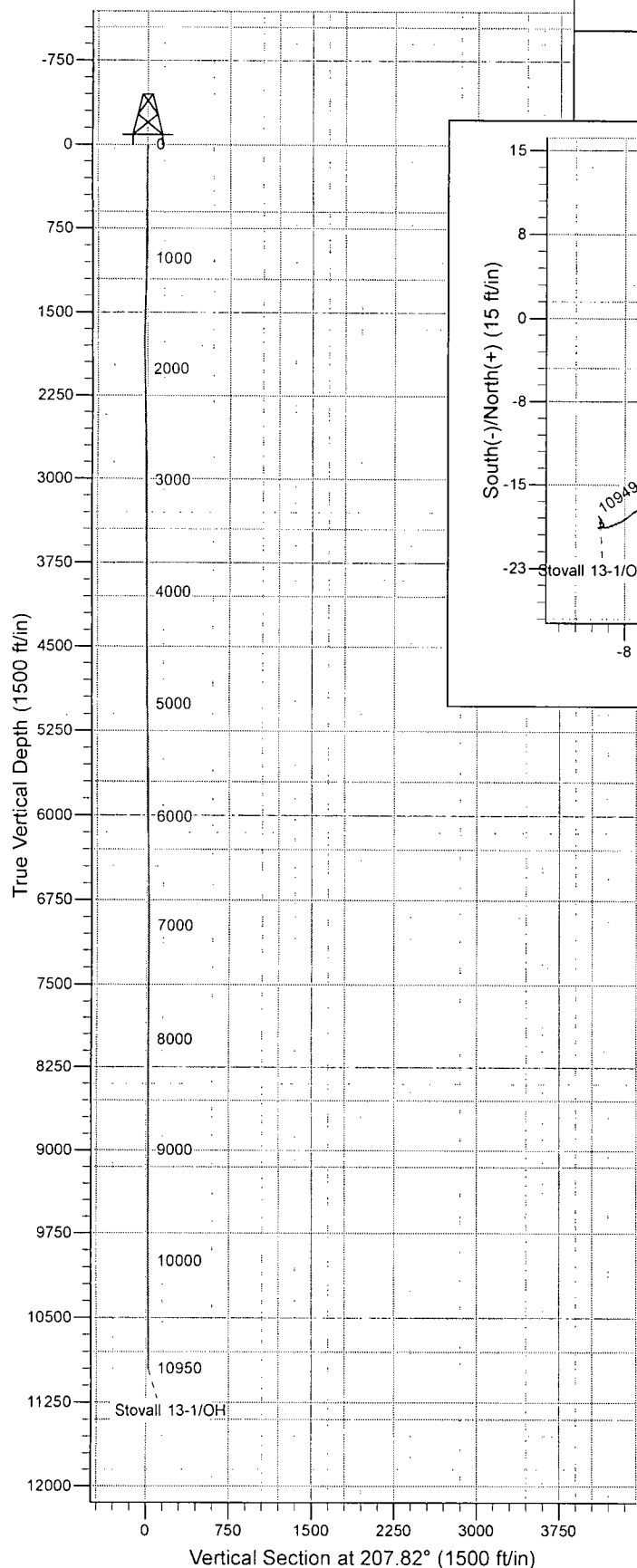
Scientific Drilling

Project: Curry County, NM
 Site: Stovall
 Well: Stovall 13-1
 Wellbore: OH
 Design: OH



WELL DETAILS: Stovall 13-1

Ground Level: GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
 Northing 1428403.38 Easting 885661.46 Latitude 34° 55' 14.340 N Longitude 103° 11' 4.940 W



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Stovall 13-1, True North
 Vertical (TVD) Reference: GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
 Calculation Method: Minimum Curvature
 Local North: True
 Location:

PROJECT DETAILS: Curry County, NM

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

Design: OH (Stovall 13-1/OH)

Created By: Julie Cruse Date: 2011-06-07



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Company:	SWEPI LP	Local Co-ordinate Reference:	Well Stovall 13-1
Project:	Curry County, NM	TVD Reference:	GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
Site:	Stovall	MD Reference:	GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
Well:	Stovall 13-1	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Rockies Compass Server

Project	Curry 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	Stovall		
Site Position:		Northing:	1,428,403.38 usft
From:	Lat/Long	Easting:	885,661.46 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	34° 55' 14.340 N
		Longitude:	103° 11' 4.940 W
		Grid Convergence:	0.66 °

Well	Stovall 13-1, 800' FNL 1835' FEL Sec 13 T8N R35E		
Well Position	+N/-S	0.00 ft	Latitude: 34° 55' 14.340 N
	+E/-W	0.00 ft	Longitude: 103° 11' 4.940 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Ground Level:	4,561.00 ft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	2011-05-13	(°)	(°)	(nT)
			7.61	62.70	50,265

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	207.82	

Survey Program	Date 2011-06-07				
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
203.00	1,733.00	Survey #1 - Surface (OH)	MWD-SDI		
2,088.00	7,670.00	Survey #2 - Intermediate (OH)	MWD-SDI		
8,079.00	10,950.00	Survey #3 - Production (OH)	MWD-SDI		

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate	
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
203.00	1.08	83.07	202.99	0.23	1.90	-1.09	0.53	0.53	0.00	
First SDI MWD Survey										
657.00	1.31	75.25	656.89	2.07	11.17	-7.04	0.06	0.05	-1.72	
1,112.00	1.59	78.81	1,111.74	4.62	22.39	-14.53	0.06	0.06	0.78	
1,488.00	1.96	82.19	1,487.56	6.50	33.87	-21.56	0.10	0.10	0.90	
1,733.00	2.19	83.59	1,732.40	7.60	42.68	-26.64	0.10	0.09	0.57	
Last Survey in 14 3/4" Hole										



Company:	SWEPI LP	Local Co-ordinate Reference:	Well Stovall 13-1
Project:	Curry County, NM	TVD Reference:	GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
Site:	Stovall	MD Reference:	GL 4561' & KB 31' @ 4592.00ft (Nabors 784)
Well:	Stovall 13-1	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Rockies Compass Server

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
2,088.00	1.77	185.64	2,087.27	2.90	48.88	-25.38	0.87	-0.12	28.75	
First Survey in 9 7/8" Hole										
2,467.00	0.98	185.33	2,466.16	-6.16	48.00	-16.96	0.21	-0.21	-0.08	
2,845.00	1.21	270.09	2,844.11	-9.37	43.71	-12.12	0.39	0.06	22.42	
3,224.00	1.07	268.56	3,223.04	-9.45	36.17	-8.53	0.04	-0.04	-0.40	
3,602.00	0.86	265.76	3,600.98	-9.75	29.82	-5.29	0.06	-0.06	-0.74	
3,980.00	0.57	275.82	3,978.95	-9.77	25.12	-3.08	0.08	-0.08	2.66	
4,357.00	0.78	253.02	4,355.93	-10.33	20.80	-0.57	0.09	0.06	-6.05	
4,735.00	0.78	259.06	4,733.89	-11.57	15.81	2.85	0.02	0.00	1.60	
5,019.00	0.87	262.77	5,017.86	-12.21	11.77	5.30	0.04	0.03	1.31	
5,398.00	0.83	260.79	5,396.82	-13.01	6.21	8.61	0.01	-0.01	-0.52	
5,777.00	0.77	245.68	5,775.79	-14.50	1.18	12.27	0.06	-0.02	-3.99	
6,156.00	0.57	261.33	6,154.76	-15.83	-3.01	15.40	0.07	-0.05	4.13	
6,535.00	0.42	233.04	6,533.75	-16.95	-5.98	17.78	0.07	-0.04	-7.46	
6,914.00	0.24	233.30	6,912.74	-18.26	-7.73	19.75	0.05	-0.05	0.07	
7,292.00	0.20	262.57	7,290.74	-18.82	-9.01	20.85	0.03	-0.01	7.74	
7,670.00	0.09	274.15	7,668.74	-18.88	-9.96	21.35	0.03	-0.03	3.06	
Last Survey in 9 7/8" Hole										
8,079.00	0.11	94.67	8,077.74	-18.89	-9.89	21.32	0.05	0.00	-43.88	
First Survey in 6 1/2" Hole										
8,458.00	0.07	15.20	8,456.74	-18.69	-9.47	20.95	0.03	-0.01	-20.97	
8,838.00	0.03	218.47	8,836.74	-18.55	-9.47	20.82	0.03	-0.01	-41.24	
9,122.00	0.22	338.40	9,120.73	-18.10	-9.72	20.54	0.08	0.07	42.23	
9,501.00	0.12	170.15	9,499.73	-17.81	-9.92	20.38	0.09	-0.03	-44.39	
9,879.00	0.11	125.11	9,877.73	-18.41	-9.55	20.74	0.02	0.00	-11.92	
10,258.00	0.07	300.09	10,256.73	-18.51	-9.46	20.78	0.05	-0.01	46.17	
10,635.00	0.05	288.45	10,633.73	-18.34	-9.81	20.80	0.01	-0.01	-3.09	
10,867.00	0.08	146.54	10,865.73	-18.44	-9.82	20.89	0.05	0.01	-61.17	
Last SDI MWD Survey										
10,950.00	0.08	146.54	10,948.73	-18.54	-9.75	20.95	0.00	0.00	0.00	
Projection to TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
203.00	202.99	0.23	1.90	First SDI MWD Survey	
1,733.00	1,732.40	7.60	42.68	Last Survey in 14 3/4" Hole	
2,088.00	2,087.27	2.90	48.88	First Survey in 9 7/8" Hole	
7,670.00	7,668.74	-18.88	-9.96	Last Survey in 9 7/8" Hole	
8,079.00	8,077.74	-18.89	-9.89	First Survey in 6 1/2" Hole	
10,867.00	10,865.73	-18.44	-9.82	Last SDI MWD Survey	
10,950.00	10,948.73	-18.54	-9.75	Projection to TD	



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Checked By: _____ Approved By: _____ Date: _____