

Cirque Resources LP

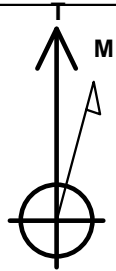
Well Name: **Pismo West 26-23-14-1CH**

Surface Location: Pismo West Pad. Sec.26-T12N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 6216.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1598537.13	3208362.77	40.973910	-104.745470	
RKB - 25' WELL @ 6241.0ft (RKB - 25')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Sectionline	1.0	-897.6	221.5	Polygon
SHL 894'FSL & 2049'FWL	1.0	0.0	0.0	Point
BHL 330' From State Line & 660'FWL	9231.0	9192.6	-1256.0	Point
Landing Pt. 1044'FSL & 660'FWL	9231.0	174.0	-1400.1	Point



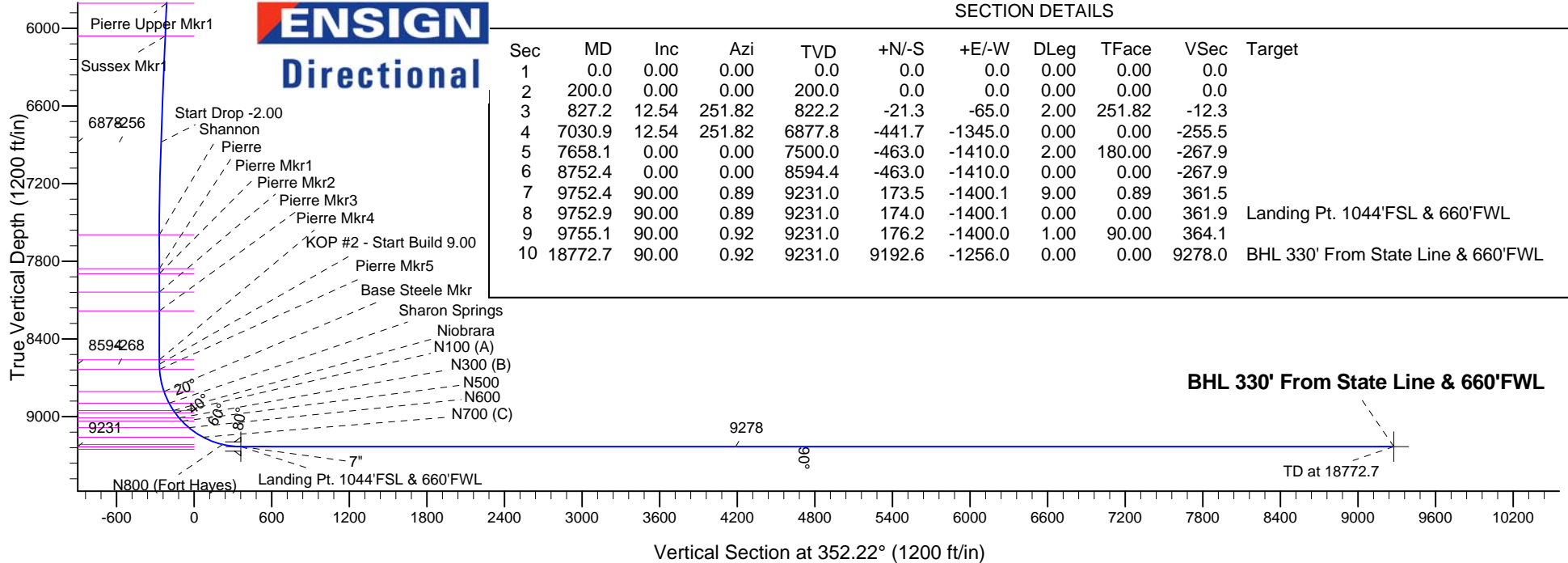
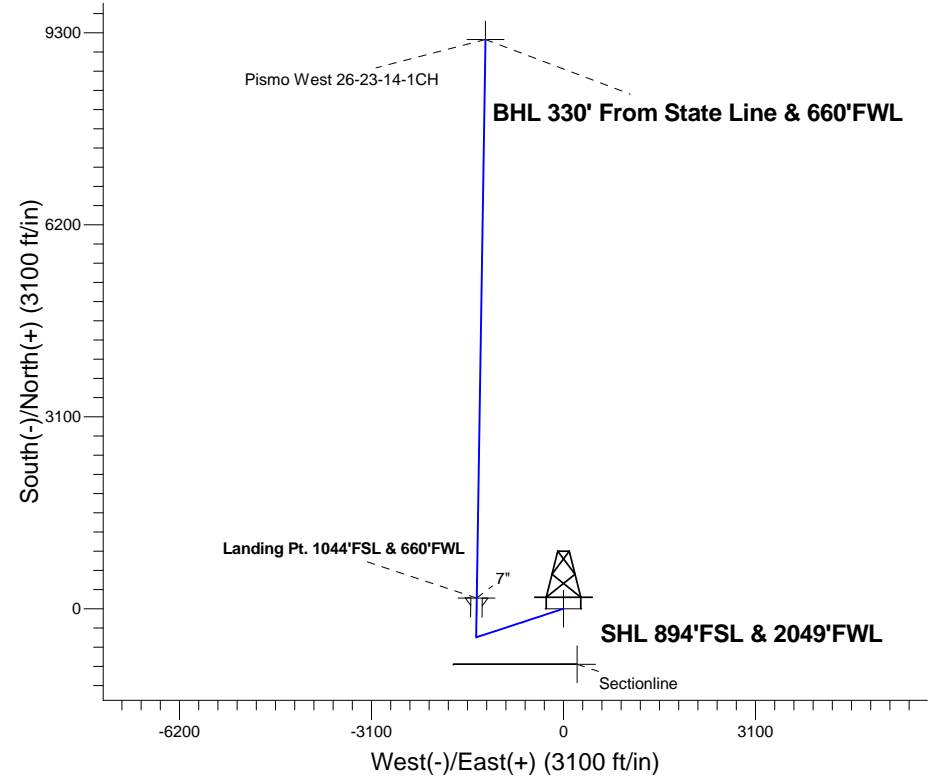
Azimuths to True North
Magnetic North: 8.47°

Magnetic Field
Strength: 53082.3snT
Dip Angle: 67.40°
Date: 8/27/2014
Model: IGRF2010

Pismo West Pad. Sec.26-T12N-R66W
Pismo West 26-23-14-1CH
Plan #2 (9-4-14)
9:58, September 05 2014

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP - Start Build 2.00
6877.8	7030.9	Start Drop -2.00
8594.3	8752.4	KOP #2 - Start Build 9.00
9231.0	18772.7	TD at 18772.7





Cirque Resources LP

Sec.26-T12N-R66W

Pismo West Pad. Sec.26-T12N-R66W

Pismo West 26-23-14-1CH

Wellbore #1

Plan: Plan #2 (9-4-14)

Standard Planning Report

05 September, 2014

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Project	Sec.26-T12N-R66W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site						Pismo West Pad. Sec.26-T12N-R66W											
Site Position:						Northing:			1,598,537.14 ft			Latitude:			40.973910		
From:			Lat/Long			Easting:			3,208,362.77 ft			Longitude:			-104.745470		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.49 °		

Well	Pismo West 26-23-14-1CH					
Well Position	+N/-S	0.0 ft	Northing:	1,598,537.13 ft	Latitude:	40.973910
	+E/-W	0.0 ft	Easting:	3,208,362.77 ft	Longitude:	-104.745470
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,216.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/27/2014	8.47	67.40	53,082

Design	Plan #2 (9-4-14)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	352.22

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
827.2	12.54	251.82	822.2	-21.3	-65.0	2.00	2.00	0.00	251.82	
7,030.9	12.54	251.82	6,877.8	-441.7	-1,345.0	0.00	0.00	0.00	0.00	
7,658.1	0.00	0.00	7,500.0	-463.0	-1,410.0	2.00	-2.00	0.00	180.00	
8,752.4	0.00	0.00	8,594.4	-463.0	-1,410.0	0.00	0.00	0.00	0.00	
9,752.4	90.00	0.89	9,231.0	173.5	-1,400.1	9.00	9.00	0.00	0.89	
9,752.9	90.00	0.89	9,231.0	174.0	-1,400.1	0.00	0.00	0.00	0.00	Landing Pt. 1044'F
9,755.1	90.00	0.92	9,231.0	176.2	-1,400.0	1.00	0.00	1.00	90.00	
18,772.7	90.00	0.92	9,231.0	9,192.6	-1,256.0	0.00	0.00	0.00	0.00	BHL 330' From Stat

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Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
300.0	2.00	251.82	300.0	-0.5	-1.7	-0.3	2.00	2.00	0.00
400.0	4.00	251.82	399.8	-2.2	-6.6	-1.3	2.00	2.00	0.00
500.0	6.00	251.82	499.5	-4.9	-14.9	-2.8	2.00	2.00	0.00
600.0	8.00	251.82	598.7	-8.7	-26.5	-5.0	2.00	2.00	0.00
700.0	10.00	251.82	697.5	-13.6	-41.4	-7.9	2.00	2.00	0.00
800.0	12.00	251.82	795.6	-19.5	-59.5	-11.3	2.00	2.00	0.00
827.2	12.54	251.82	822.2	-21.3	-65.0	-12.3	2.00	2.00	0.00
900.0	12.54	251.82	893.3	-26.3	-80.0	-15.2	0.00	0.00	0.00
1,000.0	12.54	251.82	990.9	-33.0	-100.6	-19.1	0.00	0.00	0.00
1,100.0	12.54	251.82	1,088.5	-39.8	-121.3	-23.0	0.00	0.00	0.00
1,200.0	12.54	251.82	1,186.1	-46.6	-141.9	-27.0	0.00	0.00	0.00
1,300.0	12.54	251.82	1,283.7	-53.4	-162.5	-30.9	0.00	0.00	0.00
1,400.0	12.54	251.82	1,381.3	-60.1	-183.2	-34.8	0.00	0.00	0.00
1,500.0	12.54	251.82	1,478.9	-66.9	-203.8	-38.7	0.00	0.00	0.00
1,600.0	12.54	251.82	1,576.6	-73.7	-224.4	-42.6	0.00	0.00	0.00
1,700.0	12.54	251.82	1,674.2	-80.5	-245.1	-46.6	0.00	0.00	0.00
1,800.0	12.54	251.82	1,771.8	-87.2	-265.7	-50.5	0.00	0.00	0.00
1,900.0	12.54	251.82	1,869.4	-94.0	-286.3	-54.4	0.00	0.00	0.00
2,000.0	12.54	251.82	1,967.0	-100.8	-307.0	-58.3	0.00	0.00	0.00
2,100.0	12.54	251.82	2,064.6	-107.6	-327.6	-62.2	0.00	0.00	0.00
2,200.0	12.54	251.82	2,162.2	-114.3	-348.2	-66.2	0.00	0.00	0.00
2,263.3	12.54	251.82	2,224.0	-118.6	-361.3	-68.6	0.00	0.00	0.00
Fox Hills									
2,300.0	12.54	251.82	2,259.8	-121.1	-368.9	-70.1	0.00	0.00	0.00
2,400.0	12.54	251.82	2,357.5	-127.9	-389.5	-74.0	0.00	0.00	0.00
2,500.0	12.54	251.82	2,455.1	-134.7	-410.1	-77.9	0.00	0.00	0.00
2,600.0	12.54	251.82	2,552.7	-141.5	-430.8	-81.8	0.00	0.00	0.00
2,700.0	12.54	251.82	2,650.3	-148.2	-451.4	-85.8	0.00	0.00	0.00
2,800.0	12.54	251.82	2,747.9	-155.0	-472.0	-89.7	0.00	0.00	0.00
2,900.0	12.54	251.82	2,845.5	-161.8	-492.7	-93.6	0.00	0.00	0.00
3,000.0	12.54	251.82	2,943.1	-168.6	-513.3	-97.5	0.00	0.00	0.00
3,100.0	12.54	251.82	3,040.8	-175.3	-533.9	-101.4	0.00	0.00	0.00
3,123.8	12.54	251.82	3,064.0	-176.9	-538.9	-102.4	0.00	0.00	0.00
Fox Hills Mkr 1									
3,200.0	12.54	251.82	3,138.4	-182.1	-554.6	-105.4	0.00	0.00	0.00
3,300.0	12.54	251.82	3,236.0	-188.9	-575.2	-109.3	0.00	0.00	0.00
3,400.0	12.54	251.82	3,333.6	-195.7	-595.8	-113.2	0.00	0.00	0.00
3,500.0	12.54	251.82	3,431.2	-202.4	-616.5	-117.1	0.00	0.00	0.00
3,600.0	12.54	251.82	3,528.8	-209.2	-637.1	-121.0	0.00	0.00	0.00
3,700.0	12.54	251.82	3,626.4	-216.0	-657.7	-125.0	0.00	0.00	0.00
3,800.0	12.54	251.82	3,724.0	-222.8	-678.4	-128.9	0.00	0.00	0.00
3,900.0	12.54	251.82	3,821.7	-229.5	-699.0	-132.8	0.00	0.00	0.00
4,000.0	12.54	251.82	3,919.3	-236.3	-719.6	-136.7	0.00	0.00	0.00
4,100.0	12.54	251.82	4,016.9	-243.1	-740.3	-140.6	0.00	0.00	0.00
4,200.0	12.54	251.82	4,114.5	-249.9	-760.9	-144.6	0.00	0.00	0.00
4,300.0	12.54	251.82	4,212.1	-256.6	-781.5	-148.5	0.00	0.00	0.00
4,400.0	12.54	251.82	4,309.7	-263.4	-802.2	-152.4	0.00	0.00	0.00
4,500.0	12.54	251.82	4,407.3	-270.2	-822.8	-156.3	0.00	0.00	0.00
4,600.0	12.54	251.82	4,505.0	-277.0	-843.4	-160.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Planned 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)
4,700.0	12.54	251.82	4,602.6	-283.7	-864.1	-164.2	0.00	0.00	0.00
4,786.5	12.54	251.82	4,687.0	-289.6	-881.9	-167.5	0.00	0.00	0.00
Teapot									
4,800.0	12.54	251.82	4,700.2	-290.5	-884.7	-168.1	0.00	0.00	0.00
4,900.0	12.54	251.82	4,797.8	-297.3	-905.3	-172.0	0.00	0.00	0.00
5,000.0	12.54	251.82	4,895.4	-304.1	-926.0	-175.9	0.00	0.00	0.00
5,100.0	12.54	251.82	4,993.0	-310.8	-946.6	-179.8	0.00	0.00	0.00
5,143.0	12.54	251.82	5,035.0	-313.8	-955.5	-181.5	0.00	0.00	0.00
Parkman									
5,200.0	12.54	251.82	5,090.6	-317.6	-967.3	-183.8	0.00	0.00	0.00
5,300.0	12.54	251.82	5,188.2	-324.4	-987.9	-187.7	0.00	0.00	0.00
5,400.0	12.54	251.82	5,285.9	-331.2	-1,008.5	-191.6	0.00	0.00	0.00
5,500.0	12.54	251.82	5,383.5	-337.9	-1,029.2	-195.5	0.00	0.00	0.00
5,600.0	12.54	251.82	5,481.1	-344.7	-1,049.8	-199.4	0.00	0.00	0.00
5,700.0	12.54	251.82	5,578.7	-351.5	-1,070.4	-203.4	0.00	0.00	0.00
5,762.8	12.54	251.82	5,640.0	-355.7	-1,083.4	-205.8	0.00	0.00	0.00
Sussex									
5,800.0	12.54	251.82	5,676.3	-358.3	-1,091.1	-207.3	0.00	0.00	0.00
5,900.0	12.54	251.82	5,773.9	-365.0	-1,111.7	-211.2	0.00	0.00	0.00
5,931.8	12.54	251.82	5,805.0	-367.2	-1,118.3	-212.4	0.00	0.00	0.00
Pierre Upper Mkr1									
6,000.0	12.54	251.82	5,871.5	-371.8	-1,132.3	-215.1	0.00	0.00	0.00
6,100.0	12.54	251.82	5,969.1	-378.6	-1,153.0	-219.0	0.00	0.00	0.00
6,192.0	12.54	251.82	6,059.0	-384.8	-1,171.9	-222.6	0.00	0.00	0.00
Sussex Mkr1									
6,200.0	12.54	251.82	6,066.8	-385.4	-1,173.6	-223.0	0.00	0.00	0.00
6,300.0	12.54	251.82	6,164.4	-392.1	-1,194.2	-226.9	0.00	0.00	0.00
6,400.0	12.54	251.82	6,262.0	-398.9	-1,214.9	-230.8	0.00	0.00	0.00
6,500.0	12.54	251.82	6,359.6	-405.7	-1,235.5	-234.7	0.00	0.00	0.00
6,600.0	12.54	251.82	6,457.2	-412.5	-1,256.1	-238.6	0.00	0.00	0.00
6,700.0	12.54	251.82	6,554.8	-419.2	-1,276.8	-242.6	0.00	0.00	0.00
6,800.0	12.54	251.82	6,652.4	-426.0	-1,297.4	-246.5	0.00	0.00	0.00
6,900.0	12.54	251.82	6,750.1	-432.8	-1,318.0	-250.4	0.00	0.00	0.00
7,000.0	12.54	251.82	6,847.7	-439.6	-1,338.7	-254.3	0.00	0.00	0.00
7,030.9	12.54	251.82	6,877.8	-441.7	-1,345.0	-255.5	0.00	0.00	0.00
Start Drop -2.00									
7,100.0	11.16	251.82	6,945.5	-446.1	-1,358.5	-258.1	2.00	-2.00	0.00
7,200.0	9.16	251.82	7,043.9	-451.6	-1,375.3	-261.3	2.00	-2.00	0.00
7,300.0	7.16	251.82	7,142.9	-456.0	-1,388.8	-263.8	2.00	-2.00	0.00
7,400.0	5.16	251.82	7,242.3	-459.4	-1,399.0	-265.8	2.00	-2.00	0.00
7,500.0	3.16	251.82	7,342.0	-461.6	-1,405.9	-267.1	2.00	-2.00	0.00
7,600.0	1.16	251.82	7,441.9	-462.8	-1,409.4	-267.8	2.00	-2.00	0.00
7,658.1	0.00	0.00	7,500.0	-463.0	-1,410.0	-267.9	2.00	-2.00	0.00
7,700.0	0.00	0.00	7,541.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
7,752.1	0.00	0.00	7,594.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Shannon									
7,800.0	0.00	0.00	7,641.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,741.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,841.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,014.1	0.00	0.00	7,856.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Pierre									
8,054.1	0.00	0.00	7,896.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Pierre Mkr1									

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Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Planned 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)
8,100.0	0.00	0.00	7,941.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,195.1	0.00	0.00	8,037.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Pierre Mkr2									
8,200.0	0.00	0.00	8,041.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,141.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,341.1	0.00	0.00	8,183.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Pierre Mkr3									
8,400.0	0.00	0.00	8,241.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,500.0	0.00	0.00	8,341.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,600.0	0.00	0.00	8,441.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,700.0	0.00	0.00	8,541.9	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
8,719.1	0.00	0.00	8,561.0	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
Pierre Mkr4									
8,752.4	0.00	0.00	8,594.3	-463.0	-1,410.0	-267.9	0.00	0.00	0.00
KOP #2 - Start Build 9.00									
8,793.1	3.66	0.89	8,635.0	-461.7	-1,410.0	-266.6	8.99	8.99	0.00
Pierre Mkr5									
8,800.0	4.28	0.89	8,641.9	-461.2	-1,410.0	-266.1	9.00	9.00	0.00
8,900.0	13.28	0.89	8,740.6	-446.0	-1,409.7	-251.0	9.00	9.00	0.00
8,967.1	19.32	0.89	8,805.0	-427.2	-1,409.4	-232.4	9.00	9.00	0.00
Base Steele Mkr									
9,000.0	22.28	0.89	8,835.7	-415.5	-1,409.3	-220.9	9.00	9.00	0.00
9,065.5	28.18	0.89	8,895.0	-387.6	-1,408.8	-193.3	9.00	9.00	0.00
Sharon Springs									
9,100.0	31.28	0.89	8,924.9	-370.5	-1,408.6	-176.4	9.00	9.00	0.00
9,133.4	34.29	0.89	8,953.0	-352.4	-1,408.3	-158.5	9.00	9.00	0.00
Niobrara									
9,154.2	36.16	0.89	8,970.0	-340.4	-1,408.1	-146.6	9.00	9.00	0.00
N100 (A)									
9,200.0	40.28	0.89	9,006.0	-312.1	-1,407.6	-118.6	9.00	9.00	0.00
9,204.0	40.64	0.89	9,009.0	-309.5	-1,407.6	-116.1	9.00	9.00	0.00
N300 (B)									
9,239.1	43.80	0.89	9,035.0	-285.9	-1,407.2	-92.8	9.00	9.00	0.00
N500									
9,300.0	49.28	0.89	9,076.9	-241.7	-1,406.6	-49.1	9.00	9.00	0.00
9,312.6	50.41	0.89	9,085.0	-232.1	-1,406.4	-39.6	9.00	9.00	0.00
N600									
9,400.0	58.28	0.89	9,135.9	-161.1	-1,405.3	30.6	9.00	9.00	0.00
9,444.6	62.29	0.89	9,158.0	-122.4	-1,404.7	68.9	9.00	9.00	0.00
N700 (C)									
9,500.0	67.28	0.89	9,181.6	-72.3	-1,403.9	118.4	9.00	9.00	0.00
9,600.0	76.28	0.89	9,212.8	22.6	-1,402.4	212.2	9.00	9.00	0.00
9,609.4	77.13	0.89	9,215.0	31.7	-1,402.3	221.3	9.00	9.00	0.00
N800 (Fort Hayes)									
9,700.0	85.28	0.89	9,228.8	121.2	-1,400.9	309.7	9.00	9.00	0.00
9,752.4	90.00	0.89	9,231.0	173.5	-1,400.1	361.5	9.00	9.00	0.00
9,752.9	90.00	0.89	9,231.0	174.0	-1,400.1	361.9	0.00	0.00	0.00
7"									
9,755.1	90.00	0.92	9,231.0	176.2	-1,400.0	364.1	1.00	0.00	1.00
9,800.0	90.00	0.92	9,231.0	221.1	-1,399.3	408.5	0.00	0.00	0.00
9,900.0	90.00	0.92	9,231.0	321.1	-1,397.7	507.3	0.00	0.00	0.00
10,000.0	90.00	0.92	9,231.0	421.1	-1,396.1	606.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Planned 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)
10,100.0	90.00	0.92	9,231.0	521.1	-1,394.5	705.0	0.00	0.00	0.00
10,200.0	90.00	0.92	9,231.0	621.0	-1,392.9	803.9	0.00	0.00	0.00
10,300.0	90.00	0.92	9,231.0	721.0	-1,391.3	902.7	0.00	0.00	0.00
10,400.0	90.00	0.92	9,231.0	821.0	-1,389.7	1,001.6	0.00	0.00	0.00
10,500.0	90.00	0.92	9,231.0	921.0	-1,388.1	1,100.4	0.00	0.00	0.00
10,600.0	90.00	0.92	9,231.0	1,021.0	-1,386.5	1,199.3	0.00	0.00	0.00
10,700.0	90.00	0.92	9,231.0	1,121.0	-1,384.9	1,298.1	0.00	0.00	0.00
10,800.0	90.00	0.92	9,231.0	1,221.0	-1,383.3	1,397.0	0.00	0.00	0.00
10,900.0	90.00	0.92	9,231.0	1,320.9	-1,381.7	1,495.8	0.00	0.00	0.00
11,000.0	90.00	0.92	9,231.0	1,420.9	-1,380.1	1,594.7	0.00	0.00	0.00
11,100.0	90.00	0.92	9,231.0	1,520.9	-1,378.6	1,693.5	0.00	0.00	0.00
11,200.0	90.00	0.92	9,231.0	1,620.9	-1,377.0	1,792.4	0.00	0.00	0.00
11,300.0	90.00	0.92	9,231.0	1,720.9	-1,375.4	1,891.2	0.00	0.00	0.00
11,400.0	90.00	0.92	9,231.0	1,820.9	-1,373.8	1,990.1	0.00	0.00	0.00
11,500.0	90.00	0.92	9,231.0	1,920.9	-1,372.2	2,088.9	0.00	0.00	0.00
11,600.0	90.00	0.92	9,231.0	2,020.9	-1,370.6	2,187.8	0.00	0.00	0.00
11,700.0	90.00	0.92	9,231.0	2,120.8	-1,369.0	2,286.6	0.00	0.00	0.00
11,800.0	90.00	0.92	9,231.0	2,220.8	-1,367.4	2,385.5	0.00	0.00	0.00
11,900.0	90.00	0.92	9,231.0	2,320.8	-1,365.8	2,484.3	0.00	0.00	0.00
12,000.0	90.00	0.92	9,231.0	2,420.8	-1,364.2	2,583.2	0.00	0.00	0.00
12,100.0	90.00	0.92	9,231.0	2,520.8	-1,362.6	2,682.0	0.00	0.00	0.00
12,200.0	90.00	0.92	9,231.0	2,620.8	-1,361.0	2,780.9	0.00	0.00	0.00
12,300.0	90.00	0.92	9,231.0	2,720.8	-1,359.4	2,879.7	0.00	0.00	0.00
12,400.0	90.00	0.92	9,231.0	2,820.8	-1,357.8	2,978.6	0.00	0.00	0.00
12,500.0	90.00	0.92	9,231.0	2,920.7	-1,356.2	3,077.4	0.00	0.00	0.00
12,600.0	90.00	0.92	9,231.0	3,020.7	-1,354.6	3,176.3	0.00	0.00	0.00
12,700.0	90.00	0.92	9,231.0	3,120.7	-1,353.0	3,275.1	0.00	0.00	0.00
12,800.0	90.00	0.92	9,231.0	3,220.7	-1,351.4	3,374.0	0.00	0.00	0.00
12,900.0	90.00	0.92	9,231.0	3,320.7	-1,349.8	3,472.9	0.00	0.00	0.00
13,000.0	90.00	0.92	9,231.0	3,420.7	-1,348.2	3,571.7	0.00	0.00	0.00
13,100.0	90.00	0.92	9,231.0	3,520.7	-1,346.6	3,670.6	0.00	0.00	0.00
13,200.0	90.00	0.92	9,231.0	3,620.7	-1,345.0	3,769.4	0.00	0.00	0.00
13,300.0	90.00	0.92	9,231.0	3,720.6	-1,343.4	3,868.3	0.00	0.00	0.00
13,400.0	90.00	0.92	9,231.0	3,820.6	-1,341.8	3,967.1	0.00	0.00	0.00
13,500.0	90.00	0.92	9,231.0	3,920.6	-1,340.2	4,066.0	0.00	0.00	0.00
13,600.0	90.00	0.92	9,231.0	4,020.6	-1,338.6	4,164.8	0.00	0.00	0.00
13,700.0	90.00	0.92	9,231.0	4,120.6	-1,337.0	4,263.7	0.00	0.00	0.00
13,800.0	90.00	0.92	9,231.0	4,220.6	-1,335.4	4,362.5	0.00	0.00	0.00
13,900.0	90.00	0.92	9,231.0	4,320.6	-1,333.8	4,461.4	0.00	0.00	0.00
14,000.0	90.00	0.92	9,231.0	4,420.6	-1,332.2	4,560.2	0.00	0.00	0.00
14,100.0	90.00	0.92	9,231.0	4,520.5	-1,330.6	4,659.1	0.00	0.00	0.00
14,200.0	90.00	0.92	9,231.0	4,620.5	-1,329.0	4,757.9	0.00	0.00	0.00
14,300.0	90.00	0.92	9,231.0	4,720.5	-1,327.4	4,856.8	0.00	0.00	0.00
14,400.0	90.00	0.92	9,231.0	4,820.5	-1,325.8	4,955.6	0.00	0.00	0.00
14,500.0	90.00	0.92	9,231.0	4,920.5	-1,324.2	5,054.5	0.00	0.00	0.00
14,600.0	90.00	0.92	9,231.0	5,020.5	-1,322.6	5,153.3	0.00	0.00	0.00
14,700.0	90.00	0.92	9,231.0	5,120.5	-1,321.0	5,252.2	0.00	0.00	0.00
14,800.0	90.00	0.92	9,231.0	5,220.5	-1,319.4	5,351.0	0.00	0.00	0.00
14,900.0	90.00	0.92	9,231.0	5,320.4	-1,317.8	5,449.9	0.00	0.00	0.00
15,000.0	90.00	0.92	9,231.0	5,420.4	-1,316.2	5,548.7	0.00	0.00	0.00
15,100.0	90.00	0.92	9,231.0	5,520.4	-1,314.7	5,647.6	0.00	0.00	0.00
15,200.0	90.00	0.92	9,231.0	5,620.4	-1,313.1	5,746.4	0.00	0.00	0.00
15,300.0	90.00	0.92	9,231.0	5,720.4	-1,311.5	5,845.3	0.00	0.00	0.00
15,400.0	90.00	0.92	9,231.0	5,820.4	-1,309.9	5,944.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Planned 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)
15,500.0	90.00	0.92	9,231.0	5,920.4	-1,308.3	6,043.0	0.00	0.00	0.00
15,600.0	90.00	0.92	9,231.0	6,020.3	-1,306.7	6,141.8	0.00	0.00	0.00
15,700.0	90.00	0.92	9,231.0	6,120.3	-1,305.1	6,240.7	0.00	0.00	0.00
15,800.0	90.00	0.92	9,231.0	6,220.3	-1,303.5	6,339.5	0.00	0.00	0.00
15,900.0	90.00	0.92	9,231.0	6,320.3	-1,301.9	6,438.4	0.00	0.00	0.00
16,000.0	90.00	0.92	9,231.0	6,420.3	-1,300.3	6,537.2	0.00	0.00	0.00
16,100.0	90.00	0.92	9,231.0	6,520.3	-1,298.7	6,636.1	0.00	0.00	0.00
16,200.0	90.00	0.92	9,231.0	6,620.3	-1,297.1	6,734.9	0.00	0.00	0.00
16,300.0	90.00	0.92	9,231.0	6,720.3	-1,295.5	6,833.8	0.00	0.00	0.00
16,400.0	90.00	0.92	9,231.0	6,820.2	-1,293.9	6,932.6	0.00	0.00	0.00
16,500.0	90.00	0.92	9,231.0	6,920.2	-1,292.3	7,031.5	0.00	0.00	0.00
16,600.0	90.00	0.92	9,231.0	7,020.2	-1,290.7	7,130.3	0.00	0.00	0.00
16,700.0	90.00	0.92	9,231.0	7,120.2	-1,289.1	7,229.2	0.00	0.00	0.00
16,800.0	90.00	0.92	9,231.0	7,220.2	-1,287.5	7,328.0	0.00	0.00	0.00
16,900.0	90.00	0.92	9,231.0	7,320.2	-1,285.9	7,426.9	0.00	0.00	0.00
17,000.0	90.00	0.92	9,231.0	7,420.2	-1,284.3	7,525.7	0.00	0.00	0.00
17,100.0	90.00	0.92	9,231.0	7,520.2	-1,282.7	7,624.6	0.00	0.00	0.00
17,200.0	90.00	0.92	9,231.0	7,620.1	-1,281.1	7,723.4	0.00	0.00	0.00
17,300.0	90.00	0.92	9,231.0	7,720.1	-1,279.5	7,822.3	0.00	0.00	0.00
17,400.0	90.00	0.92	9,231.0	7,820.1	-1,277.9	7,921.1	0.00	0.00	0.00
17,500.0	90.00	0.92	9,231.0	7,920.1	-1,276.3	8,020.0	0.00	0.00	0.00
17,600.0	90.00	0.92	9,231.0	8,020.1	-1,274.7	8,118.8	0.00	0.00	0.00
17,700.0	90.00	0.92	9,231.0	8,120.1	-1,273.1	8,217.7	0.00	0.00	0.00
17,800.0	90.00	0.92	9,231.0	8,220.1	-1,271.5	8,316.5	0.00	0.00	0.00
17,900.0	90.00	0.92	9,231.0	8,320.1	-1,269.9	8,415.4	0.00	0.00	0.00
18,000.0	90.00	0.92	9,231.0	8,420.0	-1,268.3	8,514.2	0.00	0.00	0.00
18,100.0	90.00	0.92	9,231.0	8,520.0	-1,266.7	8,613.1	0.00	0.00	0.00
18,200.0	90.00	0.92	9,231.0	8,620.0	-1,265.1	8,711.9	0.00	0.00	0.00
18,300.0	90.00	0.92	9,231.0	8,720.0	-1,263.5	8,810.8	0.00	0.00	0.00
18,400.0	90.00	0.92	9,231.0	8,820.0	-1,261.9	8,909.6	0.00	0.00	0.00
18,500.0	90.00	0.92	9,231.0	8,920.0	-1,260.3	9,008.5	0.00	0.00	0.00
18,600.0	90.00	0.92	9,231.0	9,020.0	-1,258.7	9,107.3	0.00	0.00	0.00
18,700.0	90.00	0.92	9,231.0	9,120.0	-1,257.1	9,206.2	0.00	0.00	0.00
18,772.7	90.00	0.92	9,231.0	9,192.6	-1,256.0	9,278.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Sectionline	0.00	0.00	1.0	-897.6	221.5	1,597,641.37	3,208,591.91	40.971446	-104.744668
- plan misses target center by 924.6ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,597,641.37	3,208,591.91		
Point 2			1.0	0.0	-2,000.0	1,597,624.35	3,206,591.91		
BHL 330' From State	0.00	0.00	9,231.0	9,192.6	-1,256.0	1,607,719.02	3,207,028.57	40.999140	-104.750020
- plan hits target center									
- Point									
Landing Pt. 1044'FSL	0.00	0.00	9,231.0	174.0	-1,400.1	1,598,699.22	3,206,961.22	40.974387	-104.750540
- plan hits target center									
- Point									
SHL 894'FSL & 2049'I	0.00	0.00	1.0	0.0	0.0	1,598,537.14	3,208,362.77	40.973910	-104.745470
- plan hits target center									
- Point									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(")	(")
	9,752.9	9,231.0	7"	7	7-1/2

Database:	Landmark	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Company:	Cirque Resources LP	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Project:	Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site:	Pismo West Pad. Sec.26-T12N-R66W	North Reference:	True
Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-4-14)		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,263.3	2,224.0	Fox Hills			
3,123.8	3,064.0	Fox Hills Mkr 1			
4,786.5	4,687.0	Teapot			
5,143.0	5,035.0	Parkman			
5,762.8	5,640.0	Sussex			
5,931.8	5,805.0	Pierre Upper Mkr1			
6,192.0	6,059.0	Sussex Mkr1			
7,752.1	7,594.0	Shannon			
8,014.1	7,856.0	Pierre			
8,054.1	7,896.0	Pierre Mkr1			
8,195.1	8,037.0	Pierre Mkr2			
8,341.1	8,183.0	Pierre Mkr3			
8,719.1	8,561.0	Pierre Mkr4			
8,793.1	8,635.0	Pierre Mkr5			
8,967.1	8,805.0	Base Steele Mkr			
9,065.5	8,895.0	Sharon Springs			
9,133.4	8,953.0	Niobrara			
9,154.2	8,970.0	N100 (A)			
9,204.0	9,009.0	N300 (B)			
9,239.1	9,035.0	N500			
9,312.6	9,085.0	N600			
9,444.6	9,158.0	N700 (C)			
9,609.4	9,215.0	N800 (Fort Hayes)			
	9,233.0	N900			
	9,233.0	Codell			
	9,253.0	Carlile			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP - Start Build 2.00
7,030.9	6,877.8	-441.7	-1,345.0	Start Drop -2.00
8,752.4	8,594.3	-463.0	-1,410.0	KOP #2 - Start Build 9.00
18,772.7	9,231.0	9,192.6	-1,256.0	TD at 18772.7



Cirque Resources LP

Sec.26-T12N-R66W

Pismo West Pad. Sec.26-T12N-R66W

Pismo West 26-23-14-1CH

Wellbore #1

Plan #2 (9-4-14)

Anticollision Report

05 September, 2014

Company:	Cirque Resources LP	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Project:	Sec.26-T12N-R66W	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Reference Site:	Pismo West Pad. Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (9-4-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (9-4-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 600.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 9/4/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	18,772.7	Plan #2 (9-4-14) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Pismo West Pad. Sec.26-T12N-R66W						
Pismo West 26-23-14-3CH - Wellbore #1 - Plan #2 (9-4-1	200.0	200.0	80.2	79.5	118.886	CC, ES
Pismo West 26-23-14-3CH - Wellbore #1 - Plan #2 (9-4-1	3,100.0	3,075.2	586.4	571.8	40.067	SF
Pismo West 26-35-2-14-2CH - Wellbore #1 - Plan #1 (8-2	200.0	200.0	41.6	40.9	61.667	CC
Pismo West 26-35-2-14-2CH - Wellbore #1 - Plan #1 (8-2	8,205.5	8,200.7	103.6	34.7	1.503	ES, SF
Pismo West 26-35-2-14-4CH - Wellbore #1 - Plan #1 (8-2	200.0	200.0	121.6	120.9	180.273	CC, ES
Pismo West 26-35-2-14-4CH - Wellbore #1 - Plan #1 (8-2	3,200.0	3,173.9	596.2	578.5	33.768	SF

Offset Design Pismo West Pad. Sec.26-T12N-R66W - Pismo West 26-23-14-3CH - Wellbore #1 - Plan #2 (9-4-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	92.60	-3.6	80.1	80.2					
100.0	100.0	100.0	100.0	0.1	0.1	92.60	-3.6	80.1	80.2	79.9	0.22	356.657	118.886 CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	92.60	-3.6	80.1	80.2	79.5	0.67	118.886		
300.0	300.0	300.0	300.0	0.5	0.6	-159.64	-3.6	80.1	81.8	80.7	1.12	73.345		
400.0	399.8	399.8	399.8	0.8	0.8	-160.81	-3.6	80.1	86.7	85.2	1.56	55.617		
500.0	499.5	499.5	499.5	1.0	1.0	-162.49	-3.6	80.1	95.0	93.0	2.01	47.168		
600.0	598.7	598.7	598.7	1.3	1.2	-164.39	-3.6	80.1	106.7	104.2	2.48	43.102		
700.0	697.5	697.5	697.5	1.6	1.5	-166.30	-3.6	80.1	121.8	118.9	2.94	41.432		
800.0	795.6	795.6	795.6	2.0	1.7	-168.06	-3.6	80.1	140.5	137.1	3.41	41.205		
900.0	893.3	893.3	893.3	2.5	1.9	-169.62	-3.6	80.1	161.7	157.8	3.88	41.709		
1,000.0	990.9	990.9	990.9	2.9	2.1	-170.85	-3.6	80.1	183.1	178.7	4.35	42.126		
1,100.0	1,088.5	1,088.5	1,088.5	3.4	2.3	-171.81	-3.6	80.1	204.6	199.7	4.82	42.449		
1,200.0	1,186.1	1,186.1	1,186.1	3.9	2.6	-172.60	-3.6	80.1	226.1	220.8	5.29	42.705		
1,300.0	1,283.7	1,283.7	1,283.7	4.3	2.8	-173.24	-3.6	80.1	247.7	241.9	5.77	42.912		
1,400.0	1,381.3	1,381.3	1,381.3	4.8	3.0	-173.79	-3.6	80.1	269.2	263.0	6.25	43.081		
1,500.0	1,478.9	1,478.9	1,478.9	5.3	3.2	-174.25	-3.6	80.1	290.8	284.1	6.73	43.222		
1,600.0	1,576.6	1,576.6	1,576.6	5.8	3.4	-174.65	-3.6	80.1	312.5	305.3	7.21	43.341		
1,700.0	1,674.2	1,674.2	1,674.2	6.3	3.7	-175.00	-3.6	80.1	334.1	326.4	7.69	43.442		
1,800.0	1,771.8	1,771.8	1,771.8	6.7	3.9	-175.30	-3.6	80.1	355.7	347.6	8.17	43.529		
1,900.0	1,869.4	1,869.4	1,869.4	7.2	4.1	-175.57	-3.6	80.1	377.4	368.7	8.66	43.604		
2,000.0	1,967.0	1,967.0	1,967.0	7.7	4.3	-175.81	-3.6	80.1	399.1	389.9	9.14	43.670		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Project:	Sec.26-T12N-R66W	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Reference Site:	Pismo West Pad. Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (9-4-14)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Pismo West Pad. Sec.26-T12N-R66W - Pismo West 26-23-14-3CH - Wellbore #1 - Plan #2 (9-4-14)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,100.0	2,064.6	2,070.3	2,070.3	8.2	4.5	-175.94	-4.5	79.8	420.3	410.7	9.61	43.715	
2,200.0	2,162.2	2,177.2	2,177.1	8.7	4.7	-175.65	-8.8	78.3	439.6	429.6	10.07	43.645	
2,300.0	2,259.8	2,284.7	2,284.2	9.2	4.9	-174.95	-17.0	75.4	457.0	446.5	10.54	43.359	
2,400.0	2,357.5	2,385.9	2,384.9	9.6	5.1	-174.05	-27.4	71.8	472.9	461.9	11.02	42.936	
2,500.0	2,455.1	2,484.4	2,482.7	10.1	5.3	-173.21	-37.6	68.2	488.9	477.4	11.50	42.509	
2,600.0	2,552.7	2,582.9	2,580.6	10.6	5.5	-172.43	-47.9	64.7	505.0	493.0	12.00	42.083	
2,700.0	2,650.3	2,681.3	2,678.5	11.1	5.7	-171.69	-58.2	61.1	521.1	508.6	12.51	41.662	
2,800.0	2,747.9	2,779.8	2,776.3	11.6	5.9	-171.00	-68.4	57.5	537.3	524.3	13.03	41.248	
2,900.0	2,845.5	2,878.3	2,874.2	12.1	6.2	-170.34	-78.7	54.0	553.6	540.1	13.56	40.843	
3,000.0	2,943.1	2,976.8	2,972.1	12.5	6.4	-169.73	-89.0	50.4	570.0	555.9	14.09	40.449	
3,100.0	3,040.8	3,075.2	3,069.9	13.0	6.7	-169.15	-99.2	46.8	586.4	571.8	14.64	40.067 SF	

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Site Error:	0.0ft	North Reference:	True
Reference Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (9-4-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	95.03	-3.6	41.4	41.6					
100.0	100.0	100.0	100.0	0.1	0.1	95.03	-3.6	41.4	41.6	41.4	0.22	185.000		
200.0	200.0	200.0	200.0	0.3	0.3	95.03	-3.6	41.4	41.6	40.9	0.67	61.667 CC		
300.0	300.0	300.0	300.0	0.5	0.6	-157.69	-3.6	41.4	43.2	42.1	1.12	38.733		
400.0	399.8	399.8	399.8	0.8	0.8	-160.02	-3.6	41.4	48.1	46.5	1.56	30.831		
500.0	499.5	501.3	501.3	1.0	1.0	-162.41	-4.3	39.8	54.7	52.7	1.99	27.442		
600.0	598.7	603.0	602.8	1.3	1.2	-164.09	-6.3	34.7	61.4	59.0	2.42	25.339		
700.0	697.5	704.9	704.4	1.6	1.4	-165.25	-9.6	26.3	68.1	65.3	2.87	23.711		
800.0	795.6	807.1	805.8	2.0	1.7	-166.03	-14.2	14.5	74.9	71.6	3.35	22.384		
900.0	893.3	909.6	906.9	2.5	2.1	-166.39	-20.2	-0.7	80.7	76.9	3.85	20.987		
1,000.0	990.9	1,011.6	1,007.0	2.9	2.4	-166.05	-27.4	-19.0	83.4	79.0	4.38	19.046		
1,100.0	1,088.5	1,111.6	1,104.9	3.4	2.8	-165.54	-34.8	-37.9	85.2	80.2	4.93	17.279		
1,200.0	1,186.1	1,211.6	1,202.8	3.9	3.3	-165.04	-42.2	-56.7	86.9	81.4	5.49	15.830		
1,300.0	1,283.7	1,311.6	1,300.7	4.3	3.7	-164.57	-49.6	-75.6	88.7	82.6	6.07	14.621		
1,400.0	1,381.3	1,411.6	1,398.7	4.8	4.1	-164.12	-57.1	-94.4	90.5	83.8	6.65	13.613		
1,500.0	1,478.9	1,511.5	1,496.6	5.3	4.6	-163.69	-64.5	-113.3	92.3	85.0	7.24	12.748		
1,600.0	1,576.6	1,611.5	1,594.5	5.8	5.0	-163.27	-71.9	-132.1	94.0	86.2	7.83	12.003		
1,700.0	1,674.2	1,711.5	1,692.4	6.3	5.4	-162.86	-79.3	-151.0	95.8	87.4	8.44	11.357		
1,800.0	1,771.8	1,811.5	1,790.3	6.7	5.9	-162.47	-86.7	-169.8	97.6	88.6	9.05	10.790		
1,900.0	1,869.4	1,911.5	1,888.2	7.2	6.3	-162.10	-94.1	-188.7	99.4	89.8	9.66	10.290		
2,000.0	1,967.0	2,011.5	1,986.1	7.7	6.8	-161.74	-101.5	-207.6	101.2	90.9	10.28	9.845		
2,100.0	2,064.6	2,111.4	2,084.0	8.2	7.2	-161.39	-108.9	-226.4	103.0	92.1	10.91	9.448		
2,200.0	2,162.2	2,211.4	2,181.9	8.7	7.7	-161.05	-116.4	-245.3	104.8	93.3	11.53	9.090		
2,300.0	2,259.8	2,311.4	2,279.8	9.2	8.2	-160.73	-123.8	-264.1	106.7	94.5	12.17	8.767		
2,400.0	2,357.5	2,411.4	2,377.7	9.6	8.6	-160.42	-131.2	-283.0	108.5	95.7	12.80	8.473		
2,500.0	2,455.1	2,511.4	2,475.6	10.1	9.1	-160.11	-138.6	-301.8	110.3	96.9	13.44	8.206		
2,600.0	2,552.7	2,611.3	2,573.5	10.6	9.5	-159.82	-146.0	-320.7	112.1	98.0	14.09	7.960		
2,700.0	2,650.3	2,711.3	2,671.4	11.1	10.0	-159.53	-153.4	-339.5	114.0	99.2	14.73	7.735		
2,800.0	2,747.9	2,811.3	2,769.4	11.6	10.4	-159.26	-160.8	-358.4	115.8	100.4	15.38	7.528		
2,900.0	2,845.5	2,911.3	2,867.3	12.1	10.9	-158.99	-168.3	-377.3	117.6	101.6	16.03	7.336		
3,000.0	2,943.1	3,011.3	2,965.2	12.5	11.3	-158.73	-175.7	-396.1	119.5	102.8	16.69	7.158		
3,100.0	3,040.8	3,111.3	3,063.1	13.0	11.8	-158.48	-183.1	-415.0	121.3	103.9	17.34	6.993		
3,200.0	3,138.4	3,211.2	3,161.0	13.5	12.3	-158.24	-190.5	-433.8	123.1	105.1	18.00	6.839		
3,300.0	3,236.0	3,311.2	3,258.9	14.0	12.7	-158.00	-197.9	-452.7	125.0	106.3	18.67	6.695		
3,400.0	3,333.6	3,411.2	3,356.8	14.5	13.2	-157.77	-205.3	-471.5	126.8	107.5	19.33	6.560		
3,500.0	3,431.2	3,511.2	3,454.7	15.0	13.6	-157.55	-212.7	-490.4	128.7	108.7	20.00	6.434		
3,600.0	3,528.8	3,611.2	3,552.6	15.4	14.1	-157.33	-220.1	-509.3	130.5	109.8	20.67	6.315		
3,700.0	3,626.4	3,711.1	3,650.5	15.9	14.5	-157.12	-227.6	-528.1	132.4	111.0	21.34	6.204		
3,800.0	3,724.0	3,811.1	3,748.4	16.4	15.0	-156.92	-235.0	-547.0	134.2	112.2	22.01	6.098		
3,900.0	3,821.7	3,911.1	3,846.3	16.9	15.5	-156.72	-242.4	-565.8	136.1	113.4	22.68	5.999		
4,000.0	3,919.3	4,011.1	3,944.2	17.4	15.9	-156.53	-249.8	-584.7	137.9	114.6	23.36	5.904		
4,100.0	4,016.9	4,111.1	4,042.2	17.9	16.4	-156.34	-257.2	-603.5	139.8	115.7	24.04	5.815		
4,200.0	4,114.5	4,211.1	4,140.1	18.3	16.8	-156.15	-264.6	-622.4	141.6	116.9	24.72	5.731		
4,300.0	4,212.1	4,311.0	4,238.0	18.8	17.3	-155.98	-272.0	-641.2	143.5	118.1	25.40	5.650		
4,400.0	4,309.7	4,411.0	4,335.9	19.3	17.7	-155.80	-279.5	-660.1	145.4	119.3	26.08	5.574		
4,500.0	4,407.3	4,511.0	4,433.8	19.8	18.2	-155.63	-286.9	-679.0	147.2	120.5	26.76	5.501		
4,600.0	4,505.0	4,611.0	4,531.7	20.3	18.7	-155.47	-294.3	-697.8	149.1	121.6	27.45	5.432		
4,700.0	4,602.6	4,711.0	4,629.6	20.8	19.1	-155.30	-301.7	-716.7	150.9	122.8	28.13	5.365		
4,800.0	4,700.2	4,810.9	4,727.5	21.3	19.6	-155.15	-309.1	-735.5	152.8	124.0	28.82	5.302		
4,900.0	4,797.8	4,910.9	4,825.4	21.7	20.0	-154.99	-316.5	-754.4	154.7	125.2	29.51	5.242		
5,000.0	4,895.4	5,010.9	4,923.3	22.2	20.5	-154.84	-323.9	-773.2	156.5	126.3	30.20	5.184		
5,100.0	4,993.0	5,110.9	5,021.2	22.7	20.9	-154.70	-331.3	-792.1	158.4	127.5	30.89	5.128		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Reference Site:	Pismo West Pad. Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (9-4-14)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.0	5,090.6	5,210.9	5,119.1	23.2	21.4	-154.55	-338.8	-810.9	160.3	128.7	31.58	5.075	
5,300.0	5,188.2	5,310.8	5,217.0	23.7	21.9	-154.41	-346.2	-829.8	162.2	129.9	32.28	5.024	
5,400.0	5,285.9	5,410.8	5,314.9	24.2	22.3	-154.28	-353.6	-848.7	164.0	131.1	32.97	4.975	
5,500.0	5,383.5	5,510.8	5,412.9	24.6	22.8	-154.14	-361.0	-867.5	165.9	132.2	33.67	4.928	
5,600.0	5,481.1	5,610.8	5,510.8	25.1	23.2	-154.01	-368.4	-886.4	167.8	133.4	34.36	4.883	
5,700.0	5,578.7	5,710.8	5,608.7	25.6	23.7	-153.89	-375.8	-905.2	169.6	134.6	35.06	4.839	
5,800.0	5,676.3	5,810.8	5,706.6	26.1	24.2	-153.76	-383.2	-924.1	171.5	135.8	35.76	4.797	
5,900.0	5,773.9	5,910.7	5,804.5	26.6	24.6	-153.64	-390.7	-942.9	173.4	136.9	36.45	4.756	
6,000.0	5,871.5	6,010.7	5,902.4	27.1	25.1	-153.52	-398.1	-961.8	175.3	138.1	37.15	4.717	
6,100.0	5,969.1	6,110.7	6,000.3	27.6	25.5	-153.40	-405.5	-980.7	177.2	139.3	37.85	4.680	
6,200.0	6,066.8	6,210.7	6,098.2	28.0	26.0	-153.29	-412.9	-999.5	179.0	140.5	38.56	4.643	
6,300.0	6,164.4	6,310.7	6,196.1	28.5	26.4	-153.17	-420.3	-1,018.4	180.9	141.6	39.26	4.608	
6,400.0	6,262.0	6,410.6	6,294.0	29.0	26.9	-153.06	-427.7	-1,037.2	182.8	142.8	39.96	4.574	
6,500.0	6,359.6	6,510.6	6,391.9	29.5	27.4	-152.96	-435.1	-1,056.1	184.7	144.0	40.66	4.541	
6,600.0	6,457.2	6,610.6	6,489.8	30.0	27.8	-152.85	-442.6	-1,074.9	186.5	145.2	41.37	4.509	
6,700.0	6,554.8	6,710.6	6,587.7	30.5	28.3	-152.75	-450.0	-1,093.8	188.4	146.4	42.07	4.479	
6,800.0	6,652.4	6,810.6	6,685.6	31.0	28.7	-152.65	-457.4	-1,112.6	190.3	147.5	42.78	4.449	
6,900.0	6,750.1	6,910.6	6,783.6	31.4	29.2	-152.55	-464.8	-1,131.5	192.2	148.7	43.48	4.420	
7,000.0	6,847.7	7,010.5	6,881.5	31.9	29.7	-152.45	-472.2	-1,150.4	194.1	149.9	44.19	4.392	
7,100.0	6,945.5	7,110.5	6,979.4	32.3	30.1	-152.35	-479.6	-1,169.2	195.2	150.3	44.92	4.364	
7,200.0	7,043.9	7,210.5	7,077.3	32.6	30.6	-151.56	-487.0	-1,188.1	193.4	147.7	45.76	4.227	
7,300.0	7,142.9	7,310.3	7,175.0	32.9	31.0	-150.32	-494.4	-1,206.9	188.6	141.8	46.82	4.029	
7,400.0	7,242.3	7,409.8	7,272.4	33.1	31.5	-148.42	-501.8	-1,225.7	181.0	132.8	48.15	3.758	
7,500.0	7,342.0	7,508.9	7,369.5	33.3	31.9	-145.68	-509.2	-1,244.3	170.6	120.7	49.85	3.422	
7,600.0	7,441.9	7,607.5	7,466.1	33.4	32.4	-141.81	-516.5	-1,262.9	157.9	105.8	52.07	3.032	
7,700.0	7,541.9	7,705.6	7,562.1	33.5	32.8	115.29	-523.7	-1,281.4	143.6	89.1	54.55	2.633	
7,800.0	7,641.9	7,803.5	7,658.0	33.6	33.3	121.70	-531.0	-1,299.9	130.4	72.5	57.90	2.252	
7,900.0	7,741.9	7,901.4	7,753.9	33.7	33.7	129.40	-538.3	-1,318.4	119.2	57.7	61.49	1.938	
8,000.0	7,841.9	7,999.4	7,849.8	33.8	34.2	138.44	-545.5	-1,336.8	110.6	45.6	64.94	1.702	
8,100.0	7,941.9	8,097.1	7,945.5	33.9	34.6	148.57	-552.7	-1,355.2	105.2	37.6	67.64	1.556	
8,200.0	8,041.9	8,195.2	8,042.1	34.0	34.9	158.06	-559.1	-1,371.3	103.6	34.7	68.88	1.504	
8,205.5	8,047.5	8,200.7	8,047.5	34.0	34.9	158.54	-559.4	-1,372.1	103.6	34.7	68.91	1.503 ES, SF	
8,300.0	8,141.9	8,294.4	8,140.3	34.1	35.2	165.85	-564.2	-1,384.5	104.4	35.4	69.03	1.513	
8,400.0	8,241.9	8,394.5	8,239.7	34.2	35.4	171.65	-568.2	-1,394.6	106.4	37.7	68.67	1.549	
8,500.0	8,341.9	8,495.2	8,340.2	34.3	35.6	175.46	-570.9	-1,401.4	108.3	40.0	68.28	1.586	
8,600.0	8,441.9	8,596.3	8,441.2	34.4	35.7	177.39	-572.3	-1,405.0	109.4	41.3	68.11	1.607	
8,700.0	8,541.9	8,697.0	8,541.9	34.6	35.8	177.69	-572.5	-1,405.6	109.6	41.4	68.26	1.606	
8,730.9	8,572.9	8,728.0	8,572.9	34.6	35.8	176.81	-572.5	-1,405.6	110.0	41.9	68.08	1.616	
8,800.0	8,641.9	8,789.9	8,634.7	34.7	35.9	176.85	-573.8	-1,405.6	112.9	44.9	68.02	1.660	
8,900.0	8,740.6	8,870.0	8,714.2	34.7	36.0	177.23	-583.9	-1,405.7	140.5	73.9	66.56	2.111	
9,000.0	8,835.7	8,937.4	8,779.6	34.7	36.2	177.58	-600.1	-1,405.8	193.0	129.3	63.68	3.030	
9,100.0	8,924.9	9,023.3	8,859.9	34.5	36.5	177.48	-616.9	-1,406.0	264.9	205.3	59.56	4.447	
9,200.0	9,006.0	9,103.3	8,859.9	34.5	36.5	177.48	-630.5	-1,406.1	350.4	296.0	54.40	6.441	
9,300.0	9,076.9	9,176.1	8,883.8	34.4	36.6	176.71	-642.2	-1,406.2	444.5	396.0	48.56	9.154	
9,400.0	9,135.9	9,205.0	8,883.8	34.2	36.6	170.26	-642.2	-1,406.2	543.1	499.0	44.06	12.326	

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Reference Depths are relative to WELL @ 6241.0ft (RKB - 25')	Coordinates are relative to: Pismo West 26-23-14-1CH
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: 0.49°



Company:	Cirque Resources LP	Local Co-ordinate Reference:	Well Pismo West 26-23-14-1CH
Project:	Sec.26-T12N-R66W	TVD Reference:	WELL @ 6241.0ft (RKB - 25')
Reference Site:	Pismo West Pad. Sec.26-T12N-R66W	MD Reference:	WELL @ 6241.0ft (RKB - 25')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pismo West 26-23-14-1CH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (9-4-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 6241.0ft (RKB - 25')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Pismo West 26-23-14-1CH
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.49°

