

AXIS EXPLORATION

ARAPAHOE COUNTY

Sec 4-T4S-R65W

JAMASO 4-65 5-6-4

ORIGINAL WELLBORE

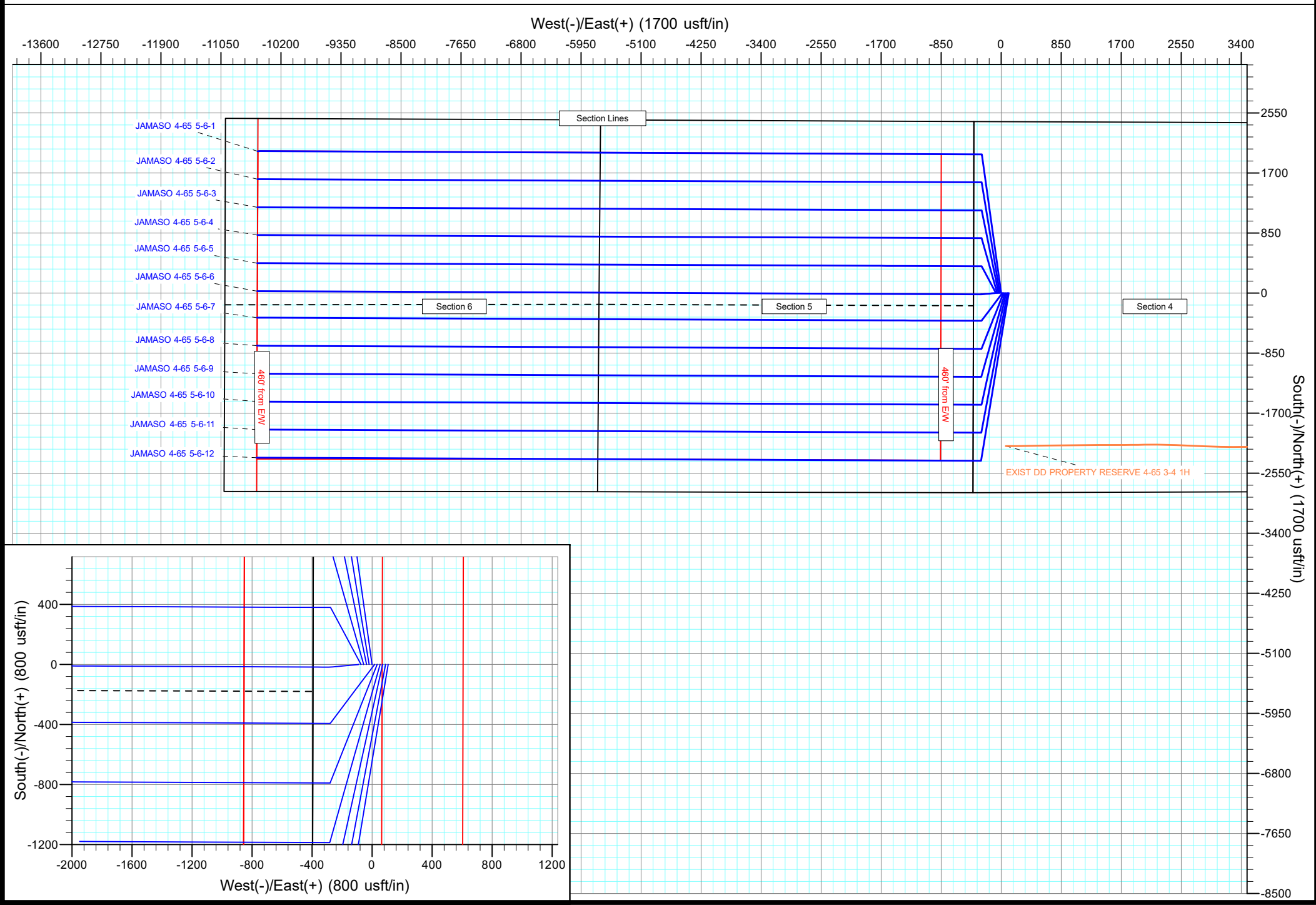
PROPOSAL 1

Anticollision Report

12 April, 2018



Project: ARAPAHOE COUNTY
Site: Sec 4-T4S-R65W
Well: JAMASO 4-65 5-6-1
ORIGINAL WELLBORE
PROPOSAL 1



Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	4/12/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,997.91	PROPOSAL 1 (ORIGINAL WELLBORE)	MWD OWSG	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec 4-T4S-R65W						
EXIST DD PROPERTY RESERVE 4-65 3-4 1H - Wellbo	7,740.51	16,985.00	2,987.05	2,712.88	10.895	CC, ES
EXIST DD PROPERTY RESERVE 4-65 3-4 1H - Wellbo	7,750.00	16,985.00	2,987.08	2,712.88	10.894	SF
JAMASO 4-65 5-6-1 - ORIGINAL WELLBORE - PROPO	410.66	410.85	55.71	53.21	22.277	CC
JAMASO 4-65 5-6-1 - ORIGINAL WELLBORE - PROPO	500.00	499.72	56.28	53.13	17.858	ES
JAMASO 4-65 5-6-1 - ORIGINAL WELLBORE - PROPO	17,997.91	18,239.20	1,187.52	631.63	2.136	SF
JAMASO 4-65 5-6-10 - ORIGINAL WELLBORE - PROPO	842.18	843.79	123.89	118.34	22.330	CC, ES
JAMASO 4-65 5-6-10 - ORIGINAL WELLBORE - PROPO	17,997.91	18,153.00	2,356.82	1,800.32	4.235	SF
JAMASO 4-65 5-6-11 - ORIGINAL WELLBORE - PROPO	692.76	694.00	143.73	139.21	31.854	CC
JAMASO 4-65 5-6-11 - ORIGINAL WELLBORE - PROPO	700.00	701.17	143.73	139.16	31.482	ES
JAMASO 4-65 5-6-11 - ORIGINAL WELLBORE - PROPO	17,997.91	18,212.39	2,754.28	2,197.57	4.947	SF
JAMASO 4-65 5-6-12 - ORIGINAL WELLBORE - PROPO	489.21	490.42	160.95	157.84	51.739	CC
JAMASO 4-65 5-6-12 - ORIGINAL WELLBORE - PROPO	500.00	501.10	160.95	157.76	50.415	ES
JAMASO 4-65 5-6-12 - ORIGINAL WELLBORE - PROPO	17,997.91	18,210.73	3,156.14	2,599.86	5.674	SF
JAMASO 4-65 5-6-2 - ORIGINAL WELLBORE - PROPO	583.88	584.00	36.08	32.34	9.651	CC
JAMASO 4-65 5-6-2 - ORIGINAL WELLBORE - PROPO	600.00	600.09	36.10	32.24	9.366	ES
JAMASO 4-65 5-6-2 - ORIGINAL WELLBORE - PROPO	17,997.91	18,089.58	791.86	236.86	1.427	Level 3, SF
JAMASO 4-65 5-6-3 - ORIGINAL WELLBORE - PROPO	750.41	750.47	19.29	14.36	3.911	CC
JAMASO 4-65 5-6-3 - ORIGINAL WELLBORE - PROPO	17,997.91	17,879.45	433.05	-78.38	0.847	Level 1, ES, SF
JAMASO 4-65 5-6-5 - ORIGINAL WELLBORE - PROPO	962.35	962.26	16.24	9.79	2.517	CC
JAMASO 4-65 5-6-5 - ORIGINAL WELLBORE - PROPO	17,997.91	17,914.91	399.83	-150.78	0.726	Level 1, ES, SF
JAMASO 4-65 5-6-6 - ORIGINAL WELLBORE - PROPO	1,029.63	1,029.38	32.47	25.54	4.684	CC, ES
JAMASO 4-65 5-6-6 - ORIGINAL WELLBORE - PROPO	17,997.91	17,769.01	814.48	273.40	1.505	SF
JAMASO 4-65 5-6-7 - ORIGINAL WELLBORE - PROPO	800.00	800.00	73.12	67.84	13.830	CC
JAMASO 4-65 5-6-7 - ORIGINAL WELLBORE - PROPO	900.00	900.02	73.62	67.62	12.263	ES
JAMASO 4-65 5-6-7 - ORIGINAL WELLBORE - PROPO	17,997.91	17,968.13	1,169.31	613.72	2.105	SF
JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPO	800.00	800.00	90.00	84.71	17.021	CC
JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPO	900.00	899.98	90.49	84.49	15.073	ES
JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPO	17,997.91	17,961.97	1,567.07	1,011.57	2.821	SF
JAMASO 4-65 5-6-9 - ORIGINAL WELLBORE - PROPO	910.68	912.34	108.57	102.53	17.979	CC, ES
JAMASO 4-65 5-6-9 - ORIGINAL WELLBORE - PROPO	17,997.91	17,892.32	1,971.74	1,417.63	3.558	SF

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 83-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	16,985.00	8,060.83	0.00	249.75	176.78	-2,164.51	121.67	8,245.92					
100.00	100.00	16,985.00	8,060.83	0.13	249.75	176.78	-2,164.51	121.67	8,149.48	8,049.62	99.86	81.608		
200.00	200.00	16,985.00	8,060.83	0.49	249.75	176.78	-2,164.51	121.67	8,053.12	7,952.75	100.37	80.233		
300.00	300.00	16,985.00	8,060.83	0.85	249.75	176.78	-2,164.51	121.67	7,956.86	7,855.95	100.91	78.853		
400.00	400.00	16,985.00	8,060.83	1.21	249.75	176.78	-2,164.51	121.67	7,860.69	7,759.22	101.47	77.469		
500.00	500.00	16,985.00	8,060.83	1.57	249.75	176.78	-2,164.51	121.67	7,764.62	7,662.56	102.06	76.082		
600.00	600.00	16,985.00	8,060.83	1.93	249.75	176.78	-2,164.51	121.67	7,668.65	7,565.98	102.67	74.693		
700.00	700.00	16,985.00	8,060.83	2.29	249.75	176.78	-2,164.51	121.67	7,572.78	7,469.47	103.31	73.302		
800.00	800.00	16,985.00	8,060.83	2.64	249.75	176.78	-2,164.51	121.67	7,477.02	7,373.04	103.98	71.911		
900.00	899.98	16,985.00	8,060.83	3.00	249.75	-168.68	-2,164.51	121.67	7,381.89	7,277.19	104.70	70.507		
1,000.00	999.84	16,985.00	8,060.83	3.36	249.75	-169.70	-2,164.51	121.67	7,288.03	7,182.52	105.51	69.074		
1,100.00	1,099.45	16,985.00	8,060.83	3.72	249.75	-170.54	-2,164.51	121.67	7,195.59	7,089.16	106.43	67.609		
1,173.53	1,172.47	16,985.00	8,060.83	3.99	249.75	-171.05	-2,164.51	121.67	7,128.63	7,021.46	107.17	66.515		
1,200.00	1,198.72	16,985.00	8,060.83	4.09	249.75	-171.05	-2,164.51	121.67	7,104.70	6,997.24	107.45	66.119		
1,300.00	1,297.87	16,985.00	8,060.83	4.47	249.75	-171.05	-2,164.51	121.67	7,014.45	6,905.88	108.57	64.608		
1,400.00	1,397.02	16,985.00	8,060.83	4.85	249.75	-171.05	-2,164.51	121.67	6,924.47	6,814.74	109.73	63.105		
1,500.00	1,496.17	16,985.00	8,060.83	5.24	249.75	-171.05	-2,164.51	121.67	6,834.77	6,723.84	110.93	61.612		
1,600.00	1,595.32	16,985.00	8,060.83	5.63	249.75	-171.05	-2,164.51	121.67	6,745.36	6,633.18	112.18	60.130		
1,700.00	1,694.47	16,985.00	8,060.83	6.03	249.75	-171.05	-2,164.51	121.67	6,656.25	6,542.78	113.47	58.659		
1,800.00	1,793.62	16,985.00	8,060.83	6.43	249.75	-171.05	-2,164.51	121.67	6,567.45	6,452.64	114.81	57.202		
1,900.00	1,892.78	16,985.00	8,060.83	6.83	249.75	-171.05	-2,164.51	121.67	6,478.98	6,362.78	116.20	55.758		
2,000.00	1,991.93	16,985.00	8,060.83	7.23	249.75	-171.05	-2,164.51	121.67	6,390.85	6,273.22	117.63	54.329		
2,100.00	2,091.08	16,985.00	8,060.83	7.63	249.75	-171.05	-2,164.51	121.67	6,303.08	6,183.96	119.11	52.916		
2,200.00	2,190.23	16,985.00	8,060.83	8.04	249.75	-171.05	-2,164.51	121.67	6,215.67	6,095.02	120.65	51.519		
2,300.00	2,289.38	16,985.00	8,060.83	8.44	249.75	-171.05	-2,164.51	121.67	6,128.65	6,006.42	122.23	50.140		
2,400.00	2,388.53	16,985.00	8,060.83	8.85	249.75	-171.05	-2,164.51	121.67	6,042.03	5,918.16	123.87	48.778		
2,500.00	2,487.68	16,985.00	8,060.83	9.25	249.75	-171.05	-2,164.51	121.67	5,955.83	5,830.27	125.56	47.434		
2,600.00	2,586.83	16,985.00	8,060.83	9.66	249.75	-171.05	-2,164.51	121.67	5,870.07	5,742.76	127.31	46.110		
2,700.00	2,685.99	16,985.00	8,060.83	10.07	249.75	-171.05	-2,164.51	121.67	5,784.77	5,655.65	129.11	44.805		
2,800.00	2,785.14	16,985.00	8,060.83	10.48	249.75	-171.05	-2,164.51	121.67	5,699.94	5,568.97	130.97	43.520		
2,900.00	2,884.29	16,985.00	8,060.83	10.89	249.75	-171.05	-2,164.51	121.67	5,615.61	5,482.72	132.90	42.256		
3,000.00	2,983.44	16,985.00	8,060.83	11.30	249.75	-171.05	-2,164.51	121.67	5,531.81	5,396.93	134.88	41.013		
3,100.00	3,082.59	16,985.00	8,060.83	11.71	249.75	-171.05	-2,164.51	121.67	5,448.55	5,311.62	136.93	39.791		
3,200.00	3,181.74	16,985.00	8,060.83	12.12	249.75	-171.05	-2,164.51	121.67	5,365.86	5,226.82	139.04	38.592		
3,300.00	3,280.89	16,985.00	8,060.83	12.53	249.75	-171.05	-2,164.51	121.67	5,283.77	5,142.55	141.22	37.415		
3,400.00	3,380.04	16,985.00	8,060.83	12.94	249.75	-171.05	-2,164.51	121.67	5,202.31	5,058.84	143.47	36.261		
3,500.00	3,479.20	16,985.00	8,060.83	13.35	249.75	-171.05	-2,164.51	121.67	5,121.50	4,975.72	145.78	35.131		
3,600.00	3,578.35	16,985.00	8,060.83	13.76	249.75	-171.05	-2,164.51	121.67	5,041.39	4,893.21	148.17	34.024		
3,700.00	3,677.50	16,985.00	8,060.83	14.17	249.75	-171.05	-2,164.51	121.67	4,961.99	4,811.36	150.63	32.941		
3,800.00	3,776.65	16,985.00	8,060.83	14.58	249.75	-171.05	-2,164.51	121.67	4,883.36	4,730.19	153.17	31.882		
3,900.00	3,875.80	16,985.00	8,060.83	14.99	249.75	-171.05	-2,164.51	121.67	4,805.51	4,649.73	155.78	30.848		
4,000.00	3,974.95	16,985.00	8,060.83	15.41	249.75	-171.05	-2,164.51	121.67	4,728.50	4,570.04	158.47	29.839		
4,100.00	4,074.10	16,985.00	8,060.83	15.82	249.75	-171.05	-2,164.51	121.67	4,652.37	4,491.14	161.23	28.856		
4,200.00	4,173.25	16,985.00	8,060.83	16.23	249.75	-171.05	-2,164.51	121.67	4,577.15	4,413.08	164.07	27.897		
4,300.00	4,272.40	16,985.00	8,060.83	16.64	249.75	-171.05	-2,164.51	121.67	4,502.90	4,335.91	166.99	26.965		
4,400.00	4,371.56	16,985.00	8,060.83	17.06	249.75	-171.05	-2,164.51	121.67	4,429.66	4,259.67	169.99	26.059		
4,500.00	4,470.71	16,985.00	8,060.83	17.47	249.75	-171.05	-2,164.51	121.67	4,357.48	4,184.42	173.06	25.178		
4,600.00	4,569.86	16,985.00	8,060.83	17.88	249.75	-171.05	-2,164.51	121.67	4,286.43	4,110.21	176.22	24.325		
4,700.00	4,669.01	16,985.00	8,060.83	18.29	249.75	-171.05	-2,164.51	121.67	4,216.54	4,037.10	179.45	23.497		
4,800.00	4,768.16	16,985.00	8,060.83	18.71	249.75	-171.05	-2,164.51	121.67	4,147.89	3,965.14	182.75	22.697		
4,900.00	4,867.31	16,985.00	8,060.83	19.12	249.75	-171.05	-2,164.51	121.67	4,080.54	3,894.41	186.13	21.923		
5,000.00	4,966.46	16,985.00	8,060.83	19.53	249.75	-171.05	-2,164.51	121.67	4,014.55	3,824.97	189.58	21.176		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 83-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,065.61	16,985.00	8,060.83	19.95	249.75	-171.05	-2,164.51	121.67	3,949.99	3,756.89	193.10	20.456		
5,200.00	5,164.77	16,985.00	8,060.83	20.36	249.75	-171.05	-2,164.51	121.67	3,886.92	3,690.25	196.68	19.763		
5,300.00	5,263.92	16,985.00	8,060.83	20.77	249.75	-171.05	-2,164.51	121.67	3,825.44	3,625.12	200.32	19.097		
5,400.00	5,363.07	16,985.00	8,060.83	21.18	249.75	-171.05	-2,164.51	121.67	3,765.60	3,561.60	204.01	18.458		
5,500.00	5,462.22	16,985.00	8,060.83	21.60	249.75	-171.05	-2,164.51	121.67	3,707.50	3,499.76	207.74	17.847		
5,600.00	5,561.37	16,985.00	8,060.83	22.01	249.75	-171.05	-2,164.51	121.67	3,651.21	3,439.70	211.51	17.262		
5,700.00	5,660.52	16,985.00	8,060.83	22.43	249.75	-171.05	-2,164.51	121.67	3,596.82	3,381.51	215.31	16.705		
5,800.00	5,759.67	16,985.00	8,060.83	22.84	249.75	-171.05	-2,164.51	121.67	3,544.42	3,325.29	219.13	16.175		
5,900.00	5,858.82	16,985.00	8,060.83	23.25	249.75	-171.05	-2,164.51	121.67	3,494.09	3,271.14	222.96	15.672		
6,000.00	5,957.97	16,985.00	8,060.83	23.67	249.75	-171.05	-2,164.51	121.67	3,445.94	3,219.16	226.77	15.195		
6,100.00	6,057.13	16,985.00	8,060.83	24.08	249.75	-171.05	-2,164.51	121.67	3,400.04	3,169.46	230.57	14.746		
6,200.00	6,156.28	16,985.00	8,060.83	24.49	249.75	-171.05	-2,164.51	121.67	3,356.49	3,122.15	234.34	14.323		
6,300.00	6,255.43	16,985.00	8,060.83	24.91	249.75	-171.05	-2,164.51	121.67	3,315.39	3,077.34	238.05	13.927		
6,400.00	6,354.58	16,985.00	8,060.83	25.32	249.75	-171.05	-2,164.51	121.67	3,276.83	3,035.13	241.70	13.558		
6,500.00	6,453.73	16,985.00	8,060.83	25.73	249.75	-171.05	-2,164.51	121.67	3,240.90	2,995.64	245.26	13.214		
6,600.00	6,552.88	16,985.00	8,060.83	26.15	249.75	-171.05	-2,164.51	121.67	3,207.68	2,958.96	248.72	12.897		
6,700.00	6,652.03	16,985.00	8,060.83	26.56	249.75	-171.05	-2,164.51	121.67	3,177.26	2,925.21	252.05	12.606		
6,800.00	6,751.18	16,985.00	8,060.83	26.98	249.75	-171.05	-2,164.51	121.67	3,149.72	2,894.48	255.24	12.340		
6,900.00	6,850.34	16,985.00	8,060.83	27.39	249.75	-171.05	-2,164.51	121.67	3,125.15	2,866.87	258.27	12.100		
7,000.00	6,949.49	16,985.00	8,060.83	27.80	249.75	-171.05	-2,164.51	121.67	3,103.60	2,842.47	261.13	11.885		
7,011.14	6,960.53	16,985.00	8,060.83	27.85	249.75	-171.05	-2,164.51	121.67	3,101.39	2,839.96	261.43	11.863		
7,100.00	7,048.80	16,985.00	8,060.83	28.21	249.75	-171.00	-2,164.51	121.67	3,083.81	2,820.03	263.78	11.691		
7,200.00	7,148.46	16,985.00	8,060.83	28.58	249.75	-170.93	-2,164.51	121.67	3,063.77	2,797.56	266.21	11.509		
7,300.00	7,248.35	16,985.00	8,060.83	28.94	249.75	-170.87	-2,164.51	121.67	3,043.49	2,775.08	268.41	11.339		
7,384.67	7,333.00	16,985.00	8,060.83	29.21	249.75	173.37	-2,164.51	121.67	3,026.14	2,756.05	270.08	11.204		
7,400.00	7,348.33	16,985.00	8,060.83	29.26	249.75	173.37	-2,164.51	121.67	3,023.02	2,752.65	270.37	11.181		
7,414.67	7,363.00	16,985.00	8,060.83	29.31	249.75	173.37	-2,164.51	121.67	3,020.10	2,749.47	270.64	11.159		
7,450.00	7,398.31	16,985.00	8,060.83	29.42	249.75	-97.54	-2,164.51	121.67	3,013.50	2,742.25	271.25	11.110		
7,500.00	7,448.02	16,985.00	8,060.83	29.58	249.75	-98.37	-2,164.51	121.67	3,005.33	2,733.30	272.03	11.048		
7,550.00	7,497.08	16,985.00	8,060.83	29.75	249.75	-99.04	-2,164.51	121.67	2,998.59	2,725.90	272.70	10.996		
7,600.00	7,545.12	16,985.00	8,060.83	29.93	249.75	-99.56	-2,164.51	121.67	2,993.36	2,720.11	273.25	10.955		
7,650.00	7,591.77	16,985.00	8,060.83	30.11	249.75	-99.92	-2,164.51	121.67	2,989.68	2,715.99	273.69	10.924		
7,700.00	7,636.69	16,985.00	8,060.83	30.30	249.75	-100.13	-2,164.51	121.67	2,987.58	2,713.57	274.01	10.903		
7,740.51	7,671.56	16,985.00	8,060.83	30.46	249.75	-100.18	-2,164.51	121.67	2,987.05	2,712.88	274.17	10.895 CC, ES		
7,750.00	7,679.52	16,985.00	8,060.83	30.49	249.75	-100.18	-2,164.51	121.67	2,987.08	2,712.88	274.20	10.894 SF		
7,800.00	7,719.94	16,985.00	8,060.83	30.70	249.75	-100.07	-2,164.51	121.67	2,988.19	2,713.91	274.27	10.895		
7,850.00	7,757.65	16,985.00	8,060.83	30.91	249.75	-99.80	-2,164.51	121.67	2,990.89	2,716.66	274.23	10.906		
7,900.00	7,792.35	16,985.00	8,060.83	31.14	249.75	-99.38	-2,164.51	121.67	2,995.17	2,721.08	274.08	10.928		
7,950.00	7,823.79	16,985.00	8,060.83	31.39	249.75	-98.80	-2,164.51	121.67	3,000.98	2,727.14	273.83	10.959		
8,000.00	7,851.72	16,985.00	8,060.83	31.67	249.75	-98.07	-2,164.51	121.67	3,008.26	2,734.77	273.49	10.999		
8,050.00	7,875.93	16,985.00	8,060.83	31.99	249.75	-97.20	-2,164.51	121.67	3,016.97	2,743.90	273.07	11.048		
8,100.00	7,896.23	16,985.00	8,060.83	32.35	249.75	-96.18	-2,164.51	121.67	3,027.00	2,754.43	272.57	11.105		
8,150.00	7,912.48	16,985.00	8,060.83	32.75	249.75	-95.03	-2,164.51	121.67	3,038.28	2,766.27	272.02	11.169		
8,200.00	7,924.55	16,985.00	8,060.83	33.20	249.75	-93.75	-2,164.51	121.67	3,050.71	2,779.31	271.41	11.240		
8,250.00	7,932.35	16,985.00	8,060.83	33.70	249.75	-92.35	-2,164.51	121.67	3,064.18	2,793.43	270.75	11.317		
8,300.00	7,935.81	16,985.00	8,060.83	34.24	249.75	-90.85	-2,164.51	121.67	3,078.57	2,808.52	270.05	11.400		
8,314.73	7,936.00	16,985.00	8,060.83	34.41	249.75	-90.39	-2,164.51	121.67	3,082.97	2,813.13	269.84	11.425		
8,400.00	7,936.00	16,985.00	8,060.83	35.44	249.75	-90.39	-2,164.51	121.67	3,109.69	2,841.11	268.58	11.578		
8,500.00	7,936.00	16,985.00	8,060.83	36.82	249.75	-90.39	-2,164.51	121.67	3,143.68	2,876.65	267.04	11.773		
8,600.00	7,936.00	16,985.00	8,060.83	38.34	249.75	-90.39	-2,164.51	121.67	3,180.46	2,915.04	265.42	11.983		
8,700.00	7,936.00	16,985.00	8,060.83	39.99	249.75	-90.39	-2,164.51	121.67	3,219.92	2,956.19	263.74	12.209		
8,800.00	7,936.00	16,985.00	8,060.83	41.75	249.75	-90.39	-2,164.51	121.67	3,261.98	3,000.00	261.98	12.451		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 83-MWVD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,936.00	16,985.00	8,060.83	43.62	249.75	-90.39	-2,164.51	121.67	3,306.52	3,046.36	260.15	12.710		
9,000.00	7,936.00	16,985.00	8,060.83	45.56	249.75	-90.39	-2,164.51	121.67	3,353.45	3,095.19	258.27	12.984		
9,100.00	7,936.00	16,985.00	8,060.83	47.59	249.75	-90.39	-2,164.51	121.67	3,402.68	3,146.36	256.32	13.275		
9,200.00	7,936.00	16,985.00	8,060.83	49.67	249.75	-90.39	-2,164.51	121.67	3,454.10	3,199.77	254.33	13.581		
9,300.00	7,936.00	16,985.00	8,060.83	51.82	249.75	-90.39	-2,164.51	121.67	3,507.62	3,255.33	252.29	13.903		
9,400.00	7,935.99	16,985.00	8,060.83	54.01	249.75	-90.39	-2,164.51	121.67	3,563.14	3,312.92	250.22	14.240		
9,500.00	7,935.99	16,985.00	8,060.83	56.25	249.75	-90.39	-2,164.51	121.67	3,620.57	3,372.46	248.11	14.593		
9,600.00	7,935.99	16,985.00	8,060.83	58.53	249.75	-90.39	-2,164.51	121.67	3,679.83	3,433.84	245.98	14.960		
9,700.00	7,935.99	16,985.00	8,060.83	60.84	249.75	-90.39	-2,164.51	121.67	3,740.82	3,496.98	243.84	15.341		
9,800.00	7,935.99	16,985.00	8,060.83	63.18	249.75	-90.39	-2,164.51	121.67	3,803.46	3,561.77	241.68	15.737		
9,900.00	7,935.99	16,985.00	8,060.83	65.55	249.75	-90.39	-2,164.51	121.67	3,867.67	3,628.14	239.53	16.147		
10,000.00	7,935.99	16,985.00	8,060.83	67.94	249.75	-90.39	-2,164.51	121.67	3,933.37	3,696.00	237.37	16.571		
10,100.00	7,935.99	16,985.00	8,060.83	70.35	249.75	-90.39	-2,164.51	121.67	4,000.50	3,765.28	235.22	17.008		
10,200.00	7,935.99	16,985.00	8,060.83	72.79	249.75	-90.39	-2,164.51	121.67	4,068.98	3,835.90	233.08	17.457		
10,300.00	7,935.99	16,985.00	8,060.83	75.24	249.75	-90.39	-2,164.51	121.67	4,138.74	3,907.78	230.96	17.920		
10,400.00	7,935.99	16,985.00	8,060.83	77.70	249.75	-90.39	-2,164.51	121.67	4,209.72	3,980.87	228.85	18.395		
10,500.00	7,935.99	16,985.00	8,060.83	80.19	249.75	-90.39	-2,164.51	121.67	4,281.86	4,055.09	226.77	18.882		
10,600.00	7,935.99	16,985.00	8,060.83	82.68	249.75	-90.39	-2,164.51	121.67	4,355.10	4,130.40	224.71	19.381		
10,700.00	7,935.99	16,985.00	8,060.83	85.19	249.75	-90.39	-2,164.51	121.67	4,429.39	4,206.72	222.67	19.892		
10,800.00	7,935.99	16,985.00	8,060.83	87.70	249.75	-90.39	-2,164.51	121.67	4,504.67	4,284.00	220.67	20.414		
10,900.00	7,935.99	16,985.00	8,060.83	90.23	249.75	-90.39	-2,164.51	121.67	4,580.90	4,362.20	218.70	20.946		
11,000.00	7,935.99	16,985.00	8,060.83	92.77	249.75	-90.39	-2,164.51	121.67	4,658.03	4,441.27	216.76	21.490		
11,100.00	7,935.99	16,985.00	8,060.83	95.31	249.75	-90.39	-2,164.51	121.67	4,736.01	4,521.16	214.85	22.044		
11,200.00	7,935.99	16,985.00	8,060.83	97.87	249.75	-90.39	-2,164.51	121.67	4,814.81	4,601.84	212.97	22.608		
11,300.00	7,935.99	16,985.00	8,060.83	100.43	249.75	-90.39	-2,164.51	121.67	4,894.38	4,683.25	211.13	23.182		
11,400.00	7,935.99	16,985.00	8,060.83	102.99	249.75	-90.39	-2,164.51	121.67	4,974.69	4,765.36	209.33	23.765		
11,500.00	7,935.98	16,985.00	8,060.83	105.57	249.75	-90.39	-2,164.51	121.67	5,055.70	4,848.14	207.56	24.358		
11,600.00	7,935.98	16,985.00	8,060.83	108.15	249.75	-90.39	-2,164.51	121.67	5,137.38	4,931.56	205.83	24.960		
11,700.00	7,935.98	16,985.00	8,060.83	110.73	249.75	-90.39	-2,164.51	121.67	5,219.70	5,015.57	204.13	25.571		
11,800.00	7,935.98	16,985.00	8,060.83	113.32	249.75	-90.39	-2,164.51	121.67	5,302.63	5,100.16	202.46	26.190		
11,900.00	7,935.98	16,985.00	8,060.83	115.91	249.75	-90.39	-2,164.51	121.67	5,386.13	5,185.30	200.84	26.818		
12,000.00	7,935.98	16,985.00	8,060.83	118.51	249.75	-90.39	-2,164.51	121.67	5,470.19	5,270.95	199.24	27.455		
12,100.00	7,935.98	16,985.00	8,060.83	121.11	249.75	-90.39	-2,164.51	121.67	5,554.78	5,357.09	197.69	28.099		
12,200.00	7,935.98	16,985.00	8,060.83	123.72	249.75	-90.39	-2,164.51	121.67	5,639.87	5,443.71	196.16	28.751		
12,300.00	7,935.98	16,985.00	8,060.83	126.33	249.75	-90.39	-2,164.51	121.67	5,725.45	5,530.77	194.67	29.410		
12,400.00	7,935.98	16,985.00	8,060.83	128.94	249.75	-90.39	-2,164.51	121.67	5,811.48	5,618.26	193.22	30.077		
12,500.00	7,935.98	16,985.00	8,060.83	131.56	249.75	-90.39	-2,164.51	121.67	5,897.96	5,706.16	191.79	30.751		
12,600.00	7,935.98	16,985.00	8,060.83	134.17	249.75	-90.39	-2,164.51	121.67	5,984.86	5,794.45	190.40	31.432		
12,700.00	7,935.98	16,985.00	8,060.83	136.80	249.75	-90.39	-2,164.51	121.67	6,072.16	5,883.11	189.04	32.120		
12,800.00	7,935.98	16,985.00	8,060.83	139.42	249.75	-90.39	-2,164.51	121.67	6,159.84	5,972.13	187.72	32.815		
12,900.00	7,935.98	16,985.00	8,060.83	142.05	249.75	-90.39	-2,164.51	121.67	6,247.90	6,061.48	186.42	33.516		
13,000.00	7,935.98	16,985.00	8,060.83	144.68	249.75	-90.39	-2,164.51	121.67	6,336.31	6,151.16	185.15	34.223		
13,100.00	7,935.98	16,985.00	8,060.83	147.31	249.75	-90.39	-2,164.51	121.67	6,425.06	6,241.15	183.91	34.936		
13,200.00	7,935.98	16,985.00	8,060.83	149.94	249.75	-90.39	-2,164.51	121.67	6,514.14	6,331.44	182.70	35.655		
13,300.00	7,935.98	16,985.00	8,060.83	152.57	249.75	-90.39	-2,164.51	121.67	6,603.53	6,422.01	181.52	36.380		
13,400.00	7,935.98	16,985.00	8,060.83	155.21	249.75	-90.39	-2,164.51	121.67	6,693.22	6,512.86	180.36	37.110		
13,500.00	7,935.97	16,985.00	8,060.83	157.85	249.75	-90.39	-2,164.51	121.67	6,783.19	6,603.96	179.23	37.846		
13,600.00	7,935.97	16,985.00	8,060.83	160.49	249.75	-90.39	-2,164.51	121.67	6,873.45	6,695.32	178.13	38.588		
13,700.00	7,935.97	16,985.00	8,060.83	163.13	249.75	-90.39	-2,164.51	121.67	6,963.97	6,786.92	177.05	39.334		
13,800.00	7,935.97	16,985.00	8,060.83	165.78	249.75	-90.39	-2,164.51	121.67	7,054.75	6,878.75	175.99	40.085		
13,900.00	7,935.97	16,985.00	8,060.83	168.42	249.75	-90.39	-2,164.51	121.67	7,145.77	6,970.81	174.96	40.841		
14,000.00	7,935.97	16,985.00	8,060.83	171.07	249.75	-90.39	-2,164.51	121.67	7,237.03	7,063.07	173.96	41.602		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - EXIST DD PROPERTY RESERVE 4-65 3-4 1H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 83-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,100.00	7,935.97	16,985.00	8,060.83	173.72	249.75	-90.39	-2,164.51	121.67	7,328.52	7,155.54	172.97	42.368	
14,200.00	7,935.97	16,985.00	8,060.83	176.36	249.75	-90.39	-2,164.51	121.67	7,420.23	7,248.21	172.01	43.137	
14,300.00	7,935.97	16,985.00	8,060.83	179.02	249.75	-90.39	-2,164.51	121.67	7,512.15	7,341.07	171.07	43.912	
14,400.00	7,935.97	16,985.00	8,060.83	181.67	249.75	-90.39	-2,164.51	121.67	7,604.27	7,434.11	170.16	44.690	
14,500.00	7,935.97	16,985.00	8,060.83	184.32	249.75	-90.39	-2,164.51	121.67	7,696.59	7,527.33	169.26	45.472	
14,600.00	7,935.97	16,985.00	8,060.83	186.97	249.75	-90.39	-2,164.51	121.67	7,789.10	7,620.72	168.38	46.259	
14,700.00	7,935.97	16,985.00	8,060.83	189.63	249.75	-90.39	-2,164.51	121.67	7,881.79	7,714.27	167.52	47.049	
14,800.00	7,935.97	16,985.00	8,060.83	192.28	249.75	-90.39	-2,164.51	121.67	7,974.66	7,807.98	166.68	47.843	
14,900.00	7,935.97	16,985.00	8,060.83	194.94	249.75	-90.39	-2,164.51	121.67	8,067.70	7,901.84	165.86	48.641	
15,000.00	7,935.97	16,985.00	8,060.83	197.60	249.75	-90.39	-2,164.51	121.67	8,160.91	7,995.85	165.06	49.442	
15,100.00	7,935.97	16,985.00	8,060.83	200.26	249.75	-90.39	-2,164.51	121.67	8,254.27	8,089.99	164.28	50.246	
15,200.00	7,935.97	16,985.00	8,060.83	202.91	249.75	-90.39	-2,164.51	121.67	8,347.79	8,184.28	163.51	51.054	
15,300.00	7,935.97	16,985.00	8,060.83	205.57	249.75	-90.39	-2,164.51	121.67	8,441.45	8,278.69	162.76	51.865	
15,400.00	7,935.97	16,985.00	8,060.83	208.24	249.75	-90.39	-2,164.51	121.67	8,535.26	8,373.24	162.03	52.679	
15,500.00	7,935.97	16,985.00	8,060.83	210.90	249.75	-90.39	-2,164.51	121.67	8,629.21	8,467.90	161.31	53.496	
15,600.00	7,935.96	16,985.00	8,060.83	213.56	249.75	-90.39	-2,164.51	121.67	8,723.29	8,562.69	160.60	54.315	
15,700.00	7,935.96	16,985.00	8,060.83	216.22	249.75	-90.39	-2,164.51	121.67	8,817.51	8,657.59	159.92	55.138	
15,800.00	7,935.96	16,985.00	8,060.83	218.89	249.75	-90.39	-2,164.51	121.67	8,911.85	8,752.60	159.24	55.963	
15,900.00	7,935.96	16,985.00	8,060.83	221.55	249.75	-90.39	-2,164.51	121.67	9,006.31	8,847.72	158.59	56.791	
16,000.00	7,935.96	16,985.00	8,060.83	224.21	249.75	-90.39	-2,164.51	121.67	9,100.89	8,942.95	157.94	57.622	
16,100.00	7,935.96	16,985.00	8,060.83	226.88	249.75	-90.39	-2,164.51	121.67	9,195.58	9,038.27	157.31	58.455	
16,200.00	7,935.96	16,985.00	8,060.83	229.55	249.75	-90.39	-2,164.51	121.67	9,290.39	9,133.70	156.69	59.290	
16,300.00	7,935.96	16,985.00	8,060.83	232.21	249.75	-90.39	-2,164.51	121.67	9,385.30	9,229.21	156.09	60.127	
16,400.00	7,935.96	16,985.00	8,060.83	234.88	249.75	-90.39	-2,164.51	121.67	9,480.32	9,324.82	155.50	60.967	
16,500.00	7,935.96	16,985.00	8,060.83	237.55	249.75	-90.39	-2,164.51	121.67	9,575.44	9,420.52	154.92	61.809	
16,600.00	7,935.96	16,985.00	8,060.83	240.21	249.75	-90.39	-2,164.51	121.67	9,670.66	9,516.31	154.35	62.653	
16,700.00	7,935.96	16,985.00	8,060.83	242.88	249.75	-90.39	-2,164.51	121.67	9,765.97	9,612.17	153.80	63.498	
16,800.00	7,935.96	16,985.00	8,060.83	245.55	249.75	-90.39	-2,164.51	121.67	9,861.38	9,708.12	153.26	64.346	
16,900.00	7,935.96	16,985.00	8,060.83	248.22	249.75	-90.39	-2,164.51	121.67	9,956.88	9,804.15	152.72	65.196	

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	56.25	56.25					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	56.25	56.25	55.98	0.27	209.221		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	56.25	56.25	55.26	0.99	57.060		
300.00	300.00	300.23	300.21	0.85	0.85	88.22	1.74	56.01	56.04	54.33	1.70	32.898		
400.00	400.00	400.22	400.05	1.21	1.22	82.86	6.93	55.29	55.72	53.29	2.42	22.993		
410.66	410.66	410.85	410.66	1.25	1.26	82.07	7.68	55.18	55.71	53.21	2.50	22.277	CC	
500.00	500.00	499.72	499.17	1.57	1.59	74.00	15.51	54.09	56.28	53.13	3.15	17.858	ES	
600.00	600.00	598.50	597.21	1.93	1.97	62.40	27.41	52.43	59.23	55.34	3.89	15.226		
700.00	700.00	696.33	693.85	2.29	2.37	49.84	42.48	50.34	66.15	61.52	4.63	14.287		
800.00	800.00	793.01	788.79	2.64	2.79	38.29	60.57	47.82	77.98	72.63	5.36	14.559		
900.00	899.98	888.72	882.11	3.00	3.24	45.14	81.60	44.89	93.62	87.56	6.06	15.443		
1,000.00	999.84	983.79	974.05	3.36	3.71	39.02	105.54	41.56	110.99	104.24	6.76	16.426		
1,100.00	1,099.45	1,078.24	1,064.55	3.72	4.22	34.77	132.29	37.83	129.33	121.88	7.44	17.373		
1,173.53	1,172.47	1,150.30	1,133.23	3.99	4.63	32.51	153.90	34.83	142.44	134.45	7.99	17.832		
1,200.00	1,198.72	1,176.35	1,158.06	4.09	4.77	31.91	161.71	33.74	146.91	138.73	8.19	17.947		
1,300.00	1,297.87	1,274.75	1,251.84	4.47	5.34	29.94	191.21	29.63	163.95	155.00	8.95	18.324		
1,400.00	1,397.02	1,373.15	1,345.62	4.85	5.91	28.34	220.71	25.52	181.14	171.43	9.71	18.652		
1,500.00	1,496.17	1,471.55	1,439.40	5.24	6.49	27.02	250.21	21.42	198.44	187.96	10.48	18.939		
1,600.00	1,595.32	1,569.94	1,533.18	5.63	7.08	25.92	279.71	17.31	215.83	204.58	11.25	19.192		
1,700.00	1,694.47	1,668.34	1,626.96	6.03	7.66	24.97	309.22	13.20	233.28	221.27	12.02	19.415		
1,800.00	1,793.62	1,766.74	1,720.74	6.43	8.25	24.16	338.72	9.10	250.79	238.00	12.79	19.614		
1,900.00	1,892.78	1,865.14	1,814.53	6.83	8.84	23.46	368.22	4.99	268.34	254.78	13.56	19.792		
2,000.00	1,991.93	1,963.53	1,908.31	7.23	9.44	22.84	397.72	0.88	285.92	271.59	14.33	19.951		
2,100.00	2,091.08	2,061.93	2,002.09	7.63	10.03	22.29	427.22	-3.23	303.54	288.43	15.10	20.095		
2,200.00	2,190.23	2,160.33	2,095.87	8.04	10.62	21.80	456.72	-7.33	321.17	305.30	15.88	20.226		
2,300.00	2,289.38	2,258.73	2,189.65	8.44	11.22	21.37	486.23	-11.44	338.83	322.18	16.65	20.345		
2,400.00	2,388.53	2,357.13	2,283.43	8.85	11.82	20.97	515.73	-15.55	356.51	339.08	17.43	20.453		
2,500.00	2,487.68	2,455.52	2,377.21	9.25	12.41	20.62	545.23	-19.65	374.19	355.99	18.21	20.553		
2,600.00	2,586.83	2,553.92	2,470.99	9.66	13.01	20.29	574.73	-23.76	391.90	372.91	18.98	20.645		
2,700.00	2,685.99	2,652.32	2,564.77	10.07	13.61	20.00	604.23	-27.87	409.61	389.85	19.76	20.729		
2,800.00	2,785.14	2,750.72	2,658.56	10.48	14.21	19.73	633.74	-31.98	427.33	406.79	20.54	20.808		
2,900.00	2,884.29	2,849.11	2,752.34	10.89	14.81	19.48	663.24	-36.08	445.06	423.75	21.31	20.880		
3,000.00	2,983.44	2,947.51	2,846.12	11.30	15.41	19.24	692.74	-40.19	462.80	440.71	22.09	20.948		
3,100.00	3,082.59	3,045.91	2,939.90	11.71	16.01	19.03	722.24	-44.30	480.55	457.68	22.87	21.011		
3,200.00	3,181.74	3,144.31	3,033.68	12.12	16.61	18.83	751.74	-48.40	498.30	474.65	23.65	21.070		
3,300.00	3,280.89	3,242.70	3,127.46	12.53	17.21	18.65	781.24	-52.51	516.06	491.63	24.43	21.125		
3,400.00	3,380.04	3,341.10	3,221.24	12.94	17.81	18.48	810.75	-56.62	533.82	508.61	25.21	21.177		
3,500.00	3,479.20	3,439.50	3,315.02	13.35	18.41	18.31	840.25	-60.73	551.58	525.60	25.99	21.226		
3,600.00	3,578.35	3,537.90	3,408.80	13.76	19.01	18.16	869.75	-64.83	569.35	542.59	26.77	21.272		
3,700.00	3,677.50	3,636.30	3,502.58	14.17	19.61	18.02	899.25	-68.94	587.13	559.58	27.55	21.315		
3,800.00	3,776.65	3,734.69	3,596.37	14.58	20.21	17.89	928.75	-73.05	604.90	576.58	28.32	21.356		
3,900.00	3,875.80	3,833.09	3,690.15	14.99	20.81	17.76	958.26	-77.15	622.68	593.58	29.10	21.395		
4,000.00	3,974.95	3,931.49	3,783.93	15.41	21.42	17.64	987.76	-81.26	640.47	610.58	29.88	21.431		
4,100.00	4,074.10	4,029.89	3,877.71	15.82	22.02	17.53	1,017.26	-85.37	658.25	627.59	30.66	21.466		
4,200.00	4,173.25	4,128.28	3,971.49	16.23	22.62	17.42	1,046.76	-89.47	676.04	644.59	31.44	21.499		
4,300.00	4,272.40	4,226.68	4,065.27	16.64	23.22	17.32	1,076.26	-93.58	693.83	661.60	32.22	21.531		
4,400.00	4,371.56	4,325.08	4,159.05	17.06	23.82	17.22	1,105.76	-97.69	711.62	678.61	33.01	21.561		
4,500.00	4,470.71	4,423.48	4,252.83	17.47	24.42	17.13	1,135.27	-101.80	729.41	695.63	33.79	21.589		
4,600.00	4,569.86	4,521.88	4,346.61	17.88	25.03	17.05	1,164.77	-105.90	747.21	712.64	34.57	21.617		
4,700.00	4,669.01	4,620.27	4,440.39	18.29	25.63	16.96	1,194.27	-110.01	765.01	729.66	35.35	21.643		
4,800.00	4,768.16	4,718.67	4,534.18	18.71	26.23	16.88	1,223.77	-114.12	782.80	746.68	36.13	21.668		
4,900.00	4,867.31	4,817.07	4,627.96	19.12	26.83	16.81	1,253.27	-118.22	800.60	763.69	36.91	21.691		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,915.47	4,721.74	19.53	27.44	16.74	1,282.78	-122.33	818.40	780.71	37.69	21.714		
5,100.00	5,065.61	5,013.86	4,815.52	19.95	28.04	16.67	1,312.28	-126.44	836.21	797.74	38.47	21.736		
5,200.00	5,164.77	5,112.26	4,909.30	20.36	28.64	16.60	1,341.78	-130.55	854.01	814.76	39.25	21.757		
5,300.00	5,263.92	5,210.66	5,003.08	20.77	29.24	16.54	1,371.28	-134.65	871.81	831.78	40.03	21.777		
5,400.00	5,363.07	5,309.06	5,096.86	21.18	29.85	16.47	1,400.78	-138.76	889.62	848.81	40.81	21.797		
5,500.00	5,462.22	5,407.45	5,190.64	21.60	30.45	16.42	1,430.28	-142.87	907.43	865.83	41.60	21.815		
5,600.00	5,561.37	5,505.85	5,284.42	22.01	31.05	16.36	1,459.79	-146.97	925.23	882.86	42.38	21.833		
5,700.00	5,660.52	5,604.25	5,378.21	22.43	31.65	16.30	1,489.29	-151.08	943.04	899.88	43.16	21.850		
5,800.00	5,759.67	5,702.65	5,471.99	22.84	32.26	16.25	1,518.79	-155.19	960.85	916.91	43.94	21.867		
5,900.00	5,858.82	5,801.05	5,565.77	23.25	32.86	16.20	1,548.29	-159.30	978.66	933.94	44.72	21.883		
6,000.00	5,957.97	5,900.56	5,659.55	23.67	33.47	16.15	1,577.79	-163.40	996.47	950.96	45.51	21.896		
6,100.00	6,057.13	6,002.16	5,753.33	24.08	34.09	16.11	1,607.29	-167.51	1,014.28	967.98	46.30	21.905		
6,200.00	6,156.28	6,103.76	5,847.11	24.49	34.71	16.06	1,636.80	-171.62	1,032.09	984.99	47.10	21.913		
6,300.00	6,255.43	6,205.36	5,940.89	24.91	35.33	16.02	1,666.30	-175.72	1,049.91	1,002.01	47.90	21.921		
6,400.00	6,354.58	6,306.97	6,034.67	25.32	35.96	15.97	1,695.80	-179.83	1,067.72	1,019.03	48.69	21.929		
6,500.00	6,453.73	6,408.57	6,128.45	25.73	36.58	15.93	1,725.30	-183.94	1,085.53	1,036.05	49.49	21.936		
6,600.00	6,552.88	6,489.83	6,222.23	26.15	37.08	15.89	1,754.80	-188.04	1,103.35	1,053.15	50.20	21.981		
6,700.00	6,652.03	6,588.23	6,316.02	26.56	37.68	15.85	1,784.31	-192.15	1,121.16	1,070.18	50.98	21.993		
6,800.00	6,751.18	6,686.62	6,409.80	26.98	38.28	15.82	1,813.81	-196.26	1,138.98	1,087.22	51.76	22.005		
6,900.00	6,850.34	6,811.43	6,528.97	27.39	39.04	15.78	1,850.50	-201.37	1,156.34	1,103.60	52.74	21.924		
7,000.00	6,949.49	6,977.28	6,689.42	27.80	39.94	15.78	1,892.02	-207.15	1,169.07	1,115.15	53.92	21.683		
7,011.14	6,960.53	6,995.90	6,707.57	27.85	40.04	15.78	1,896.10	-207.72	1,170.14	1,116.10	54.04	21.654		
7,100.00	7,048.80	7,144.93	6,853.79	28.21	40.73	15.85	1,924.57	-211.68	1,177.39	1,122.47	54.92	21.440		
7,200.00	7,148.46	7,313.56	7,020.78	28.58	41.39	15.91	1,947.65	-214.89	1,183.24	1,127.52	55.72	21.235		
7,300.00	7,248.35	7,482.84	7,189.49	28.94	41.93	15.94	1,960.99	-216.75	1,186.61	1,130.28	56.32	21.067		
7,384.67	7,333.00	7,626.41	7,333.00	29.21	42.29	0.14	1,964.55	-217.24	1,187.50	1,130.83	56.68	20.952		
7,400.00	7,348.33	7,641.74	7,348.33	29.26	42.32	0.14	1,964.55	-217.24	1,187.50	1,130.73	56.78	20.915		
7,414.67	7,363.00	7,656.41	7,363.00	29.31	42.35	0.14	1,964.55	-217.24	1,187.50	1,130.63	56.87	20.880		
7,416.54	7,364.87	7,658.28	7,364.87	29.31	42.36	89.89	1,964.55	-217.24	1,187.50	1,130.62	56.88	20.876		
7,450.00	7,398.31	7,691.60	7,398.17	29.42	42.43	89.89	1,964.55	-218.32	1,187.50	1,130.40	57.10	20.796		
7,500.00	7,448.02	7,741.39	7,447.67	29.58	42.54	89.89	1,964.58	-223.54	1,187.50	1,130.06	57.44	20.674		
7,550.00	7,497.08	7,791.19	7,496.54	29.75	42.66	89.89	1,964.62	-233.02	1,187.50	1,129.71	57.80	20.546		
7,600.00	7,545.12	7,840.99	7,544.41	29.93	42.79	89.89	1,964.68	-246.72	1,187.50	1,129.33	58.18	20.412		
7,650.00	7,591.77	7,890.80	7,590.91	30.11	42.92	89.90	1,964.76	-264.52	1,187.50	1,128.93	58.58	20.272		
7,700.00	7,636.69	7,940.61	7,635.70	30.30	43.05	89.90	1,964.85	-286.29	1,187.50	1,128.50	59.01	20.125		
7,750.00	7,679.52	7,990.44	7,678.43	30.49	43.20	89.91	1,964.97	-311.88	1,187.50	1,128.04	59.47	19.970		
7,800.00	7,719.94	8,040.27	7,718.79	30.70	43.34	89.91	1,965.09	-341.08	1,187.51	1,127.54	59.96	19.805		
7,850.00	7,757.65	8,090.11	7,756.47	30.91	43.50	89.92	1,965.24	-373.69	1,187.51	1,127.00	60.50	19.628		
7,900.00	7,792.35	8,139.97	7,791.18	31.14	43.66	89.93	1,965.40	-409.46	1,187.51	1,126.41	61.10	19.437		
7,950.00	7,823.79	8,189.84	7,822.65	31.39	43.83	89.93	1,965.57	-448.12	1,187.51	1,125.76	61.75	19.230		
8,000.00	7,851.72	8,239.73	7,850.66	31.67	44.01	89.94	1,965.75	-489.38	1,187.51	1,125.03	62.48	19.007		
8,050.00	7,875.93	8,289.62	7,874.98	31.99	44.21	89.95	1,965.94	-532.93	1,187.51	1,124.23	63.28	18.765		
8,100.00	7,896.23	8,339.54	7,895.42	32.35	44.42	89.96	1,966.14	-578.45	1,187.51	1,123.34	64.17	18.506		
8,150.00	7,912.48	8,389.47	7,911.84	32.75	44.66	89.97	1,966.35	-625.59	1,187.51	1,122.37	65.14	18.231		
8,200.00	7,924.55	8,439.42	7,924.09	33.20	44.92	89.98	1,966.56	-674.00	1,187.51	1,121.33	66.19	17.942		
8,250.00	7,932.35	8,489.39	7,932.08	33.70	45.20	89.99	1,966.78	-723.31	1,187.51	1,120.20	67.31	17.642		
8,300.00	7,935.81	8,539.37	7,935.75	34.24	45.51	90.00	1,967.00	-773.14	1,187.52	1,119.02	68.50	17.336		
8,314.73	7,936.00	8,558.86	7,936.00	34.41	45.64	90.00	1,967.06	-787.87	1,187.52	1,118.60	68.91	17.232		
8,400.00	7,936.00	8,639.37	7,936.00	35.44	46.21	90.00	1,967.44	-873.14	1,187.52	1,116.42	71.09	16.703		
8,500.00	7,936.00	8,739.37	7,936.00	36.82	47.05	90.00	1,967.88	-973.14	1,187.52	1,113.54	73.98	16.052		
8,600.00	7,936.00	8,839.37	7,936.00	38.34	48.01	90.00	1,968.32	-1,073.14	1,187.52	1,110.39	77.13	15.397		
8,700.00	7,936.00	8,939.37	7,935.99	39.99	49.11	90.00	1,968.75	-1,173.13	1,187.53	1,107.01	80.52	14.749		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Sec 4-T4S-R65W - JAMASO 4-6S 5-6-1 - ORIGINAL WELLBORE - PROPOSAL 1		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Distance								Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
8,800.00	7,936.00	9,039.37	7,935.99	41.75	50.35	90.00	1,969.19	-1,273.13	1,187.53	1,103.42	84.11	14.118				
8,900.00	7,936.00	9,139.37	7,935.99	43.62	51.71	90.00	1,969.63	-1,373.13	1,187.53	1,099.64	87.89	13.512				
9,000.00	7,936.00	9,239.37	7,935.99	45.56	53.20	90.00	1,970.07	-1,473.13	1,187.53	1,095.71	91.83	12.932				
9,100.00	7,936.00	9,339.37	7,935.99	47.59	54.80	90.00	1,970.51	-1,573.13	1,187.54	1,091.63	95.91	12.382				
9,200.00	7,936.00	9,439.37	7,935.99	49.67	56.51	90.00	1,970.95	-1,673.13	1,187.54	1,087.43	100.11	11.863				
9,300.00	7,936.00	9,539.37	7,935.99	51.82	58.30	90.00	1,971.39	-1,773.13	1,187.54	1,083.13	104.42	11.373				
9,400.00	7,935.99	9,639.37	7,935.98	54.01	60.18	90.00	1,971.83	-1,873.13	1,187.55	1,078.72	108.82	10.913				
9,500.00	7,935.99	9,739.37	7,935.98	56.25	62.13	90.00	1,972.27	-1,973.13	1,187.55	1,074.24	113.31	10.481				
9,600.00	7,935.99	9,839.37	7,935.98	58.53	64.15	90.00	1,972.71	-2,073.13	1,187.55	1,069.68	117.87	10.075				
9,700.00	7,935.99	9,939.37	7,935.98	60.84	66.22	90.00	1,973.15	-2,173.12	1,187.55	1,065.05	122.50	9.694				
9,800.00	7,935.99	10,039.37	7,935.98	63.18	68.35	90.00	1,973.59	-2,273.12	1,187.56	1,060.37	127.19	9.337				
9,900.00	7,935.99	10,139.37	7,935.98	65.55	70.52	90.00	1,974.03	-2,373.12	1,187.56	1,055.63	131.93	9.001				
10,000.00	7,935.99	10,239.37	7,935.98	67.94	72.73	90.00	1,974.47	-2,473.12	1,187.56	1,050.84	136.72	8.686				
10,100.00	7,935.99	10,339.37	7,935.97	70.35	74.97	90.00	1,974.91	-2,573.12	1,187.56	1,046.01	141.55	8.390				
10,200.00	7,935.99	10,439.37	7,935.97	72.79	77.25	90.00	1,975.35	-2,673.12	1,187.57	1,041.15	146.42	8.111				
10,300.00	7,935.99	10,539.37	7,935.97	75.24	79.56	90.00	1,975.79	-2,773.12	1,187.57	1,036.25	151.32	7.848				
10,400.00	7,935.99	10,639.37	7,935.97	77.70	81.89	90.00	1,976.23	-2,873.12	1,187.57	1,031.31	156.26	7.600				
10,500.00	7,935.99	10,739.37	7,935.97	80.19	84.25	90.00	1,976.67	-2,973.12	1,187.57	1,026.35	161.22	7.366				
10,600.00	7,935.99	10,839.37	7,935.97	82.68	86.63	90.00	1,977.11	-3,073.12	1,187.58	1,021.37	166.21	7.145				
10,700.00	7,935.99	10,939.37	7,935.97	85.19	89.02	90.00	1,977.55	-3,173.12	1,187.58	1,016.36	171.22	6.936				
10,800.00	7,935.99	11,039.37	7,935.96	87.70	91.44	90.00	1,977.99	-3,273.11	1,187.58	1,011.32	176.26	6.738				
10,900.00	7,935.99	11,139.37	7,935.96	90.23	93.87	90.00	1,978.43	-3,373.11	1,187.59	1,006.27	181.31	6.550				
11,000.00	7,935.99	11,239.37	7,935.96	92.77	96.32	90.00	1,978.87	-3,473.11	1,187.59	1,001.20	186.39	6.372				
11,100.00	7,935.99	11,339.37	7,935.96	95.31	98.78	90.00	1,979.31	-3,573.11	1,187.59	996.12	191.48	6.202				
11,200.00	7,935.99	11,439.37	7,935.96	97.87	101.25	90.00	1,979.75	-3,673.11	1,187.59	991.01	196.58	6.041				
11,300.00	7,935.99	11,539.37	7,935.96	100.43	103.74	90.00	1,980.19	-3,773.11	1,187.60	985.90	201.70	5.888				
11,400.00	7,935.99	11,639.37	7,935.96	102.99	106.23	90.00	1,980.63	-3,873.11	1,187.60	980.77	206.83	5.742				
11,500.00	7,935.98	11,739.37	7,935.95	105.57	108.74	90.00	1,981.07	-3,973.11	1,187.60	975.63	211.98	5.603				
11,600.00	7,935.98	11,839.37	7,935.95	108.15	111.25	90.00	1,981.51	-4,073.11	1,187.60	970.47	217.13	5.470				
11,700.00	7,935.98	11,939.37	7,935.95	110.73	113.78	90.00	1,981.95	-4,173.11	1,187.61	965.31	222.30	5.342				
11,800.00	7,935.98	12,039.37	7,935.95	113.32	116.31	90.00	1,982.39	-4,273.10	1,187.61	960.13	227.47	5.221				
11,900.00	7,935.98	12,139.37	7,935.95	115.91	118.84	90.00	1,982.83	-4,373.10	1,187.61	954.95	232.66	5.104				
12,000.00	7,935.98	12,239.37	7,935.95	118.51	121.39	90.00	1,983.27	-4,473.10	1,187.61	949.76	237.85	4.993				
12,100.00	7,935.98	12,339.37	7,935.95	121.11	123.94	90.00	1,983.71	-4,573.10	1,187.62	944.56	243.06	4.886				
12,200.00	7,935.98	12,439.37	7,935.94	123.72	126.50	90.00	1,984.15	-4,673.10	1,187.62	939.35	248.27	4.784				
12,300.00	7,935.98	12,539.37	7,935.94	126.33	129.06	90.00	1,984.59	-4,773.10	1,187.62	934.14	253.48	4.685				
12,400.00	7,935.98	12,639.37	7,935.94	128.94	131.63	90.00	1,985.03	-4,873.10	1,187.63	928.92	258.71	4.591				
12,500.00	7,935.98	12,739.37	7,935.94	131.56	134.20	90.00	1,985.47	-4,973.10	1,187.63	923.69	263.94	4.500				
12,600.00	7,935.98	12,839.37	7,935.94	134.17	136.78	90.00	1,985.91	-5,073.10	1,187.63	918.46	269.17	4.412				
12,700.00	7,935.98	12,939.37	7,935.94	136.80	139.36	90.00	1,986.35	-5,173.10	1,187.63	913.22	274.41	4.328				
12,800.00	7,935.98	13,039.37	7,935.94	139.42	141.95	90.00	1,986.79	-5,273.09	1,187.64	907.98	279.66	4.247				
12,900.00	7,935.98	13,139.37	7,935.93	142.05	144.54	90.00	1,987.23	-5,373.09	1,187.64	902.73	284.91	4.168				
13,000.00	7,935.98	13,239.37	7,935.93	144.68	147.14	90.00	1,987.67	-5,473.09	1,187.64	897.47	290.17	4.093				
13,100.00	7,935.98	13,339.37	7,935.93	147.31	149.73	90.00	1,988.11	-5,573.09	1,187.64	892.22	295.43	4.020				
13,200.00	7,935.98	13,439.37	7,935.93	149.94	152.34	90.00	1,988.55	-5,673.09	1,187.65	886.95	300.69	3.950				
13,300.00	7,935.98	13,539.37	7,935.93	152.57	154.94	90.00	1,988.99	-5,773.09	1,187.65	881.69	305.96	3.882				
13,400.00	7,935.98	13,639.37	7,935.93	155.21	157.55	90.00	1,989.43	-5,873.09	1,187.65	876.42	311.23	3.816				
13,500.00	7,935.97	13,739.37	7,935.93	157.85	160.16	90.00	1,989.87	-5,973.09	1,187.66	871.14	316.51	3.752				
13,600.00	7,935.97	13,839.37	7,935.92	160.49	162.77	90.00	1,990.31	-6,073.09	1,187.66	865.87	321.79	3.691				
13,700.00	7,935.97	13,939.37	7,935.92	163.13	165.38	90.00	1,990.75	-6,173.09	1,187.66	860.59	327.07	3.631				
13,800.00	7,935.97	14,039.37	7,935.92	165.78	168.00	90.00	1,991.19	-6,273.09	1,187.66	855.30	332.36	3.573				
13,900.00	7,935.97	14,139.37	7,935.92	168.42	170.62	90.00	1,991.63	-6,373.08	1,187.67	850.02	337.65	3.517				

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Sec 4-T4S-R65W - JAMASO 4-6S 5-6-1 - ORIGINAL WELLBORE - PROPOSAL 1		Offset Site Error:		0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:		0.00 usft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
14,000.00	7,935.97	14,239.37	7,935.92	171.07	173.24	90.00	1,992.07	-6,473.08	1,187.67	844.73	342.94	3.463					
14,100.00	7,935.97	14,339.37	7,935.92	173.72	175.87	90.00	1,992.51	-6,573.08	1,187.67	839.44	348.23	3.411					
14,200.00	7,935.97	14,439.37	7,935.92	176.36	178.50	90.00	1,992.95	-6,673.08	1,187.67	834.14	353.53	3.359					
14,300.00	7,935.97	14,539.37	7,935.91	179.02	181.12	90.00	1,993.39	-6,773.08	1,187.68	828.85	358.83	3.310					
14,400.00	7,935.97	14,639.37	7,935.91	181.67	183.75	90.00	1,993.83	-6,873.08	1,187.68	823.55	364.13	3.262					
14,500.00	7,935.97	14,739.37	7,935.91	184.32	186.39	90.00	1,994.27	-6,973.08	1,187.68	818.25	369.44	3.215					
14,600.00	7,935.97	14,839.37	7,935.91	186.97	189.02	90.00	1,994.71	-7,073.08	1,187.68	812.94	374.74	3.169					
14,700.00	7,935.97	14,939.37	7,935.91	189.63	191.65	90.00	1,995.15	-7,173.08	1,187.69	807.64	380.05	3.125					
14,800.00	7,935.97	15,039.37	7,935.91	192.28	194.29	90.00	1,995.59	-7,273.08	1,187.69	802.33	385.36	3.082					
14,900.00	7,935.97	15,139.37	7,935.91	194.94	196.93	90.00	1,996.03	-7,373.07	1,187.69	797.02	390.67	3.040					
15,000.00	7,935.97	15,239.37	7,935.90	197.60	199.57	90.00	1,996.47	-7,473.07	1,187.70	791.71	395.99	2.999					
15,100.00	7,935.97	15,339.37	7,935.90	200.26	202.21	90.00	1,996.91	-7,573.07	1,187.70	786.40	401.30	2.960					
15,200.00	7,935.97	15,439.37	7,935.90	202.91	204.85	90.00	1,997.35	-7,673.07	1,187.70	781.08	406.62	2.921					
15,300.00	7,935.97	15,539.37	7,935.90	205.57	207.49	90.00	1,997.79	-7,773.07	1,187.70	775.76	411.94	2.883					
15,400.00	7,935.97	15,639.37	7,935.90	208.24	210.14	90.00	1,998.23	-7,873.07	1,187.71	770.45	417.26	2.846					
15,500.00	7,935.97	15,739.37	7,935.90	210.90	212.78	90.00	1,998.67	-7,973.07	1,187.71	765.13	422.58	2.811					
15,600.00	7,935.96	15,839.37	7,935.90	213.56	215.43	90.00	1,999.11	-8,073.07	1,187.71	759.81	427.91	2.776					
15,700.00	7,935.96	15,939.37	7,935.89	216.22	218.08	90.00	1,999.55	-8,173.07	1,187.71	754.48	433.23	2.742					
15,800.00	7,935.96	16,039.37	7,935.89	218.89	220.73	90.00	1,999.99	-8,273.07	1,187.72	749.16	438.56	2.708					
15,900.00	7,935.96	16,139.37	7,935.89	221.55	223.38	90.00	2,000.43	-8,373.06	1,187.72	743.84	443.88	2.676					
16,000.00	7,935.96	16,239.37	7,935.89	224.21	226.03	90.00	2,000.87	-8,473.06	1,187.72	738.51	449.21	2.644					
16,100.00	7,935.96	16,339.37	7,935.89	226.88	228.68	90.00	2,001.31	-8,573.06	1,187.72	733.18	454.54	2.613					
16,200.00	7,935.96	16,439.37	7,935.89	229.55	231.33	90.00	2,001.75	-8,673.06	1,187.73	727.85	459.87	2.583					
16,300.00	7,935.96	16,539.37	7,935.89	232.21	233.99	90.00	2,002.19	-8,773.06	1,187.73	722.52	465.21	2.553					
16,400.00	7,935.96	16,639.37	7,935.88	234.88	236.64	90.00	2,002.63	-8,873.06	1,187.73	717.19	470.54	2.524					
16,500.00	7,935.96	16,739.37	7,935.88	237.55	239.30	90.00	2,003.07	-8,973.06	1,187.74	711.86	475.87	2.496					
16,600.00	7,935.96	16,839.37	7,935.88	240.21	241.95	90.00	2,003.51	-9,073.06	1,187.74	706.53	481.21	2.468					
16,700.00	7,935.96	16,939.37	7,935.88	242.88	244.61	90.00	2,003.95	-9,173.06	1,187.74	701.20	486.54	2.441					
16,800.00	7,935.96	17,039.37	7,935.88	245.55	247.27	90.00	2,004.39	-9,273.06	1,187.74	695.86	491.88	2.415					
16,900.00	7,935.96	17,139.37	7,935.88	248.22	249.93	90.00	2,004.83	-9,373.06	1,187.75	690.53	497.22	2.389					
17,000.00	7,935.96	17,239.37	7,935.88	250.89	252.58	90.00	2,005.27	-9,473.05	1,187.75	685.19	502.56	2.363					
17,100.00	7,935.96	17,339.37	7,935.87	253.56	255.24	90.00	2,005.71	-9,573.05	1,187.75	679.85	507.90	2.339					
17,200.00	7,935.96	17,439.37	7,935.87	256.23	257.90	90.00	2,006.15	-9,673.05	1,187.75	674.51	513.24	2.314					
17,300.00	7,935.96	17,539.37	7,935.87	258.90	260.57	90.00	2,006.59	-9,773.05	1,187.76	669.18	518.58	2.290					
17,400.00	7,935.96	17,639.37	7,935.87	261.58	263.23	90.00	2,007.03	-9,873.05	1,187.76	663.84	523.92	2.267					
17,500.00	7,935.96	17,739.37	7,935.87	264.25	265.89	90.00	2,007.47	-9,973.05	1,187.76	658.50	529.27	2.244					
17,600.00	7,935.96	17,839.37	7,935.87	266.92	268.55	90.00	2,007.91	-10,073.05	1,187.77	653.16	534.61	2.222					
17,700.00	7,935.95	17,939.37	7,935.87	269.59	271.21	90.00	2,008.35	-10,173.05	1,187.77	647.81	539.95	2.200					
17,800.00	7,935.95	18,039.37	7,935.86	272.26	273.88	90.00	2,008.79	-10,273.05	1,187.77	642.47	545.30	2.178					
17,900.00	7,935.95	18,139.37	7,935.86	274.94	276.54	90.00	2,009.23	-10,373.05	1,187.77	637.13	550.65	2.157					
17,997.91	7,936.00	18,239.20	7,936.00	277.56	279.20	90.00	2,009.33	-10,472.87	1,187.52	631.63	555.89	2.136 SF					

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	126.56	126.56					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	126.56	126.56	126.29	0.27	470.746		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	126.56	126.56	125.58	0.99	128.385		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	126.56	126.56	124.86	1.70	74.328		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	126.56	126.56	124.14	2.42	52.305		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	126.56	126.56	123.43	3.14	40.350		
600.00	600.00	600.92	600.90	1.93	1.91	90.79	-1.74	126.18	126.19	122.35	3.84	32.866		
700.00	700.00	701.59	701.43	2.29	2.25	93.17	-6.92	125.03	125.23	120.70	4.53	27.616		
800.00	800.00	801.77	801.21	2.64	2.60	97.18	-15.50	123.13	124.11	118.87	5.24	23.673		
842.18	842.18	843.79	842.96	2.79	2.75	115.30	-20.12	122.11	123.89	118.34	5.55	22.330 CC, ES		
900.00	899.98	900.98	899.67	3.00	2.96	119.29	-27.35	120.51	124.42	118.45	5.97	20.856		
1,000.00	999.84	998.47	995.96	3.36	3.35	127.99	-42.24	117.22	128.84	122.14	6.70	19.223		
1,100.00	1,099.45	1,093.65	1,089.41	3.72	3.74	137.88	-59.84	113.32	139.81	132.36	7.44	18.783		
1,173.53	1,172.47	1,161.83	1,155.96	3.99	4.05	145.05	-74.31	110.12	153.13	145.15	7.98	19.187		
1,200.00	1,198.72	1,186.01	1,179.47	4.09	4.16	147.55	-79.81	108.90	159.00	150.83	8.17	19.465		
1,300.00	1,297.87	1,277.23	1,267.78	4.47	4.59	155.99	-102.14	103.96	184.74	175.88	8.86	20.849		
1,400.00	1,397.02	1,370.11	1,357.54	4.85	5.06	162.62	-125.44	98.81	214.06	204.50	9.56	22.393		
1,500.00	1,496.17	1,462.99	1,447.30	5.24	5.53	167.69	-148.75	93.65	245.48	235.23	10.25	23.940		
1,600.00	1,595.32	1,555.86	1,537.05	5.63	6.02	171.62	-172.06	88.49	278.29	267.35	10.95	25.418		
1,700.00	1,694.47	1,648.74	1,626.81	6.03	6.51	174.73	-195.36	83.34	312.06	300.42	11.65	26.796		
1,800.00	1,793.62	1,741.62	1,716.57	6.43	7.01	177.24	-218.67	78.18	346.50	334.16	12.34	28.068		
1,900.00	1,892.78	1,834.50	1,806.33	6.83	7.51	179.31	-241.97	73.02	381.43	368.39	13.05	29.236		
2,000.00	1,991.93	1,927.38	1,896.09	7.23	8.01	-178.97	-265.28	67.87	416.73	402.98	13.75	30.305		
2,100.00	2,091.08	2,020.26	1,985.85	7.63	8.52	-177.52	-288.58	62.71	452.32	437.86	14.46	31.285		
2,200.00	2,190.23	2,113.14	2,075.61	8.04	9.03	-176.27	-311.89	57.55	488.12	472.95	15.17	32.183		
2,300.00	2,289.38	2,206.02	2,165.37	8.44	9.54	-175.20	-335.20	52.40	524.10	508.22	15.88	33.008		
2,400.00	2,388.53	2,301.11	2,255.13	8.85	10.06	-174.26	-358.50	47.24	560.21	543.62	16.60	33.749		
2,500.00	2,487.68	2,408.23	2,344.89	9.25	10.66	-173.43	-381.81	42.08	596.45	579.08	17.37	34.331		
2,600.00	2,586.83	2,484.65	2,434.65	9.66	11.08	-172.70	-405.11	36.92	632.78	614.76	18.02	35.115		
2,700.00	2,685.99	2,577.53	2,524.40	10.07	11.60	-172.05	-428.42	31.77	669.19	650.45	18.74	35.715		
2,800.00	2,785.14	2,670.41	2,614.16	10.48	12.12	-171.46	-451.73	26.61	705.67	686.21	19.45	36.272		
2,900.00	2,884.29	2,763.29	2,703.92	10.89	12.64	-170.94	-475.03	21.45	742.20	722.03	20.17	36.790		
3,000.00	2,983.44	2,856.17	2,793.68	11.30	13.15	-170.46	-498.34	16.30	778.79	757.90	20.89	37.274		
3,100.00	3,082.59	2,949.04	2,883.44	11.71	13.67	-170.02	-521.64	11.14	815.42	793.80	21.61	37.726		
3,200.00	3,181.74	3,041.92	2,973.20	12.12	14.19	-169.62	-544.95	5.98	852.08	829.75	22.34	38.148		
3,300.00	3,280.89	3,134.80	3,062.96	12.53	14.72	-169.26	-568.25	0.83	888.78	865.73	23.06	38.545		
3,400.00	3,380.04	3,227.68	3,152.72	12.94	15.24	-168.92	-591.56	-4.33	925.51	901.73	23.78	38.918		
3,500.00	3,479.20	3,320.56	3,242.48	13.35	15.76	-168.61	-614.87	-9.49	962.26	937.76	24.50	39.269		
3,600.00	3,578.35	3,413.44	3,332.24	13.76	16.28	-168.32	-638.17	-14.64	999.04	973.81	25.23	39.599		
3,700.00	3,677.50	3,506.32	3,421.99	14.17	16.80	-168.06	-661.48	-19.80	1,035.84	1,009.88	25.95	39.911		
3,800.00	3,776.65	3,600.81	3,511.75	14.58	17.34	-167.81	-684.78	-24.96	1,072.65	1,045.97	26.69	40.196		
3,900.00	3,875.80	3,707.93	3,601.51	14.99	17.94	-167.57	-708.09	-30.11	1,109.48	1,082.01	27.47	40.389		
4,000.00	3,974.95	3,784.95	3,691.27	15.41	18.37	-167.36	-731.40	-35.27	1,146.33	1,118.20	28.13	40.751		
4,100.00	4,074.10	3,877.83	3,781.03	15.82	18.90	-167.15	-754.70	-40.43	1,183.19	1,154.33	28.86	41.002		
4,200.00	4,173.25	3,970.71	3,870.79	16.23	19.42	-166.96	-778.01	-45.58	1,220.06	1,190.48	29.58	41.241		
4,300.00	4,272.40	4,063.59	3,960.55	16.64	19.94	-166.78	-801.31	-50.74	1,256.94	1,226.63	30.31	41.468		
4,400.00	4,371.56	4,156.47	4,050.31	17.06	20.47	-166.61	-824.62	-55.90	1,293.84	1,262.80	31.04	41.685		
4,500.00	4,470.71	4,249.35	4,140.07	17.47	20.99	-166.45	-847.92	-61.05	1,330.74	1,298.97	31.77	41.891		
4,600.00	4,569.86	4,342.22	4,229.83	17.88	21.52	-166.30	-871.23	-66.21	1,367.65	1,335.16	32.49	42.088		
4,700.00	4,669.01	4,435.10	4,319.59	18.29	22.04	-166.15	-894.54	-71.37	1,404.57	1,371.35	33.22	42.276		
4,800.00	4,768.16	4,527.98	4,409.34	18.71	22.57	-166.01	-917.84	-76.52	1,441.50	1,407.54	33.95	42.456		
4,900.00	4,867.31	4,620.86	4,499.10	19.12	23.09	-165.88	-941.15	-81.68	1,478.43	1,443.75	34.68	42.628		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,713.74	4,588.86	19.53	23.62	-165.76	-964.45	-86.84	1,515.37	1,479.96	35.41	42.793		
5,100.00	5,065.61	4,806.62	4,678.62	19.95	24.14	-165.64	-987.76	-91.99	1,552.31	1,516.17	36.14	42.951		
5,200.00	5,164.77	4,899.50	4,768.38	20.36	24.67	-165.53	-1,011.07	-97.15	1,589.26	1,552.39	36.87	43.103		
5,300.00	5,263.92	5,007.63	4,858.14	20.77	25.28	-165.42	-1,034.37	-102.31	1,626.22	1,588.55	37.66	43.176		
5,400.00	5,363.07	5,085.25	4,947.90	21.18	25.72	-165.32	-1,057.68	-107.46	1,663.18	1,624.85	38.33	43.388		
5,500.00	5,462.22	5,178.13	5,037.66	21.60	26.24	-165.22	-1,080.98	-112.62	1,700.14	1,661.08	39.06	43.522		
5,600.00	5,561.37	5,271.01	5,127.42	22.01	26.77	-165.13	-1,104.29	-117.78	1,737.11	1,697.32	39.79	43.652		
5,700.00	5,660.52	5,363.89	5,217.18	22.43	27.30	-165.04	-1,127.59	-122.93	1,774.09	1,733.56	40.53	43.776		
5,800.00	5,759.67	5,456.77	5,306.94	22.84	27.82	-164.95	-1,150.90	-128.09	1,811.06	1,769.80	41.26	43.896		
5,900.00	5,858.82	5,549.65	5,396.69	23.25	28.35	-164.87	-1,174.21	-133.25	1,848.04	1,806.05	41.99	44.011		
6,000.00	5,957.97	5,642.53	5,486.45	23.67	28.87	-164.79	-1,197.51	-138.40	1,885.03	1,842.30	42.72	44.122		
6,100.00	6,057.13	5,735.40	5,576.21	24.08	29.40	-164.71	-1,220.82	-143.56	1,922.01	1,878.56	43.46	44.230		
6,200.00	6,156.28	5,828.28	5,665.97	24.49	29.92	-164.64	-1,244.12	-148.72	1,959.00	1,914.81	44.19	44.333		
6,300.00	6,255.43	5,921.16	5,755.73	24.91	30.45	-164.57	-1,267.43	-153.87	1,995.99	1,951.07	44.92	44.433		
6,400.00	6,354.58	6,014.04	5,845.49	25.32	30.98	-164.50	-1,290.74	-159.03	2,032.99	1,987.33	45.65	44.530		
6,500.00	6,453.73	6,106.92	5,935.25	25.73	31.50	-164.43	-1,314.04	-164.19	2,069.98	2,023.59	46.39	44.623		
6,600.00	6,552.88	6,200.20	6,025.01	26.15	32.03	-164.37	-1,337.35	-169.34	2,106.98	2,059.86	47.12	44.712		
6,700.00	6,652.03	6,307.32	6,114.77	26.56	32.64	-164.31	-1,360.65	-174.50	2,143.98	2,096.07	47.92	44.745		
6,800.00	6,751.18	6,385.55	6,204.53	26.98	33.08	-164.25	-1,383.96	-179.66	2,180.98	2,132.40	48.59	44.886		
6,900.00	6,850.34	6,478.43	6,294.29	27.39	33.61	-164.19	-1,407.26	-184.81	2,217.99	2,168.67	49.32	44.967		
7,000.00	6,949.49	6,571.31	6,384.04	27.80	34.13	-164.14	-1,430.57	-189.97	2,255.00	2,204.94	50.06	45.047		
7,011.14	6,960.53	6,581.66	6,394.04	27.85	34.19	-164.13	-1,433.17	-190.55	2,259.12	2,208.98	50.14	45.055		
7,100.00	7,048.80	6,664.66	6,474.26	28.21	34.66	-164.26	-1,453.99	-195.15	2,290.77	2,239.98	50.79	45.100		
7,200.00	7,148.46	6,759.12	6,565.54	28.58	35.20	-164.36	-1,477.70	-200.40	2,323.41	2,271.88	51.53	45.092		
7,300.00	7,248.35	7,109.30	6,907.86	28.94	36.97	-164.20	-1,548.78	-216.13	2,349.43	2,295.55	53.88	43.607		
7,384.67	7,333.00	7,536.02	7,333.00	29.21	38.41	-179.93	-1,579.75	-222.98	2,356.80	2,301.12	55.68	42.325		
7,400.00	7,348.33	7,551.35	7,348.33	29.26	38.44	-179.93	-1,579.75	-222.98	2,356.80	2,301.02	55.78	42.252		
7,414.67	7,363.00	7,566.02	7,363.00	29.31	38.47	-179.93	-1,579.75	-222.98	2,356.80	2,300.93	55.87	42.182		
7,450.00	7,398.31	7,601.81	7,398.77	29.42	38.56	-90.18	-1,579.75	-224.10	2,356.80	2,300.70	56.10	42.008		
7,500.00	7,448.02	7,652.46	7,449.11	29.58	38.69	-90.18	-1,579.72	-229.49	2,356.80	2,300.35	56.45	41.751		
7,550.00	7,497.08	7,703.10	7,498.78	29.75	38.83	-90.18	-1,579.68	-239.30	2,356.80	2,299.99	56.81	41.483		
7,600.00	7,545.12	7,753.72	7,547.37	29.93	38.98	-90.17	-1,579.62	-253.45	2,356.80	2,299.60	57.20	41.203		
7,650.00	7,591.77	7,804.33	7,594.50	30.11	39.13	-90.17	-1,579.54	-271.83	2,356.80	2,299.20	57.61	40.912		
7,700.00	7,636.69	7,854.91	7,639.81	30.30	39.29	-90.16	-1,579.44	-294.28	2,356.80	2,298.76	58.04	40.608		
7,750.00	7,679.52	7,905.46	7,682.94	30.49	39.45	-90.15	-1,579.33	-320.62	2,356.80	2,298.30	58.50	40.288		
7,800.00	7,719.94	7,955.98	7,723.55	30.70	39.62	-90.14	-1,579.20	-350.64	2,356.80	2,297.81	59.00	39.948		
7,850.00	7,757.65	8,006.47	7,761.34	30.91	39.80	-90.13	-1,579.05	-384.09	2,356.80	2,297.26	59.54	39.584		
7,900.00	7,792.35	8,056.92	7,796.02	31.14	39.99	-90.12	-1,578.89	-420.71	2,356.80	2,296.67	60.14	39.191		
7,917.37	7,803.65	8,074.43	7,807.28	31.23	40.05	-90.11	-1,578.83	-434.12	2,356.80	2,296.44	60.36	39.043		
7,950.00	7,823.79	8,107.32	7,827.31	31.39	40.18	-90.11	-1,578.72	-460.20	2,356.80	2,296.00	60.80	38.764		
8,000.00	7,851.72	8,157.67	7,854.99	31.67	40.39	-90.09	-1,578.54	-502.25	2,356.80	2,295.27	61.53	38.301		
8,050.00	7,875.93	8,207.98	7,878.85	31.99	40.61	-90.08	-1,578.35	-546.52	2,356.80	2,294.45	62.35	37.800		
8,100.00	7,896.23	8,258.24	7,898.72	32.35	40.85	-90.07	-1,578.14	-592.66	2,356.80	2,293.55	63.25	37.260		
8,150.00	7,912.48	8,308.44	7,914.45	32.75	41.11	-90.05	-1,577.94	-640.31	2,356.80	2,292.56	64.24	36.687		
8,200.00	7,924.55	8,358.59	7,925.95	33.20	41.39	-90.03	-1,577.73	-689.11	2,356.80	2,291.49	65.32	36.083		
8,250.00	7,932.35	8,408.68	7,933.13	33.70	41.70	-90.02	-1,577.51	-738.67	2,356.80	2,290.34	66.47	35.458		
8,300.00	7,935.81	8,458.72	7,935.95	34.24	42.05	-90.00	-1,577.29	-788.61	2,356.81	2,289.12	67.69	34.820		
8,314.73	7,936.00	8,473.45	7,936.00	34.41	42.15	-90.00	-1,577.23	-803.34	2,356.81	2,288.75	68.06	34.630		
8,400.00	7,936.00	8,558.72	7,936.00	35.44	42.83	-90.00	-1,576.86	-888.61	2,356.81	2,286.46	70.35	33.500		
8,500.00	7,936.00	8,658.72	7,936.00	36.82	43.77	-90.00	-1,576.42	-988.61	2,356.81	2,283.51	73.30	32.152		
8,600.00	7,936.00	8,758.72	7,935.99	38.34	44.86	-90.00	-1,575.99	-1,088.60	2,356.81	2,280.30	76.52	30.801		
8,700.00	7,936.00	8,858.72	7,935.99	39.99	46.10	-90.00	-1,575.55	-1,188.60	2,356.82	2,276.85	79.97	29.472		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.00	7,936.00	8,958.72	7,935.99	41.75	47.49	-90.00	-1,575.12	-1,288.60	2,356.82	2,273.20	83.62	28.185		
8,900.00	7,936.00	9,058.72	7,935.99	43.62	49.01	-90.00	-1,574.68	-1,388.60	2,356.82	2,269.37	87.45	26.950		
9,000.00	7,936.00	9,158.72	7,935.99	45.56	50.66	-90.00	-1,574.25	-1,488.60	2,356.82	2,265.38	91.44	25.774		
9,100.00	7,936.00	9,258.72	7,935.99	47.59	52.41	-90.00	-1,573.82	-1,588.60	2,356.83	2,261.26	95.57	24.661		
9,200.00	7,936.00	9,358.72	7,935.98	49.67	54.27	-90.00	-1,573.38	-1,688.60	2,356.83	2,257.02	99.81	23.612		
9,300.00	7,936.00	9,458.72	7,935.98	51.82	56.20	-90.00	-1,572.95	-1,788.60	2,356.83	2,252.67	104.17	22.626		
9,400.00	7,935.99	9,558.72	7,935.98	54.01	58.21	-90.00	-1,572.51	-1,888.60	2,356.83	2,248.23	108.61	21.700		
9,500.00	7,935.99	9,658.72	7,935.98	56.25	60.29	-90.00	-1,572.08	-1,988.60	2,356.84	2,243.70	113.13	20.832		
9,600.00	7,935.99	9,758.72	7,935.98	58.53	62.41	-90.00	-1,571.64	-2,088.60	2,356.84	2,239.11	117.73	20.019		
9,700.00	7,935.99	9,858.72	7,935.97	60.84	64.59	-90.00	-1,571.21	-2,188.59	2,356.84	2,234.45	122.39	19.256		
9,800.00	7,935.99	9,958.72	7,935.97	63.18	66.81	-90.00	-1,570.77	-2,288.59	2,356.84	2,229.73	127.11	18.541		
9,900.00	7,935.99	10,058.72	7,935.97	65.55	69.07	-90.00	-1,570.34	-2,388.59	2,356.85	2,224.97	131.88	17.871		
10,000.00	7,935.99	10,158.72	7,935.97	67.94	71.37	-90.00	-1,569.90	-2,488.59	2,356.85	2,220.15	136.70	17.241		
10,100.00	7,935.99	10,258.72	7,935.97	70.35	73.69	-90.00	-1,569.47	-2,588.59	2,356.85	2,215.30	141.55	16.650		
10,200.00	7,935.99	10,358.72	7,935.97	72.79	76.04	-90.00	-1,569.03	-2,688.59	2,356.86	2,210.41	146.45	16.094		
10,300.00	7,935.99	10,458.72	7,935.96	75.24	78.42	-90.00	-1,568.60	-2,788.59	2,356.86	2,205.48	151.37	15.570		
10,400.00	7,935.99	10,558.72	7,935.96	77.70	80.82	-90.00	-1,568.16	-2,888.59	2,356.86	2,200.53	156.33	15.076		
10,500.00	7,935.99	10,658.72	7,935.96	80.19	83.24	-90.00	-1,567.73	-2,988.59	2,356.86	2,195.55	161.31	14.611		
10,600.00	7,935.99	10,758.72	7,935.96	82.68	85.67	-90.00	-1,567.29	-3,088.59	2,356.87	2,190.54	166.32	14.171		
10,700.00	7,935.99	10,858.72	7,935.96	85.19	88.12	-90.00	-1,566.86	-3,188.58	2,356.87	2,185.52	171.35	13.754		
10,800.00	7,935.99	10,958.72	7,935.95	87.70	90.59	-90.00	-1,566.43	-3,288.58	2,356.87	2,180.47	176.40	13.361		
10,900.00	7,935.99	11,058.72	7,935.95	90.23	93.07	-90.00	-1,565.99	-3,388.58	2,356.87	2,175.40	181.48	12.987		
11,000.00	7,935.99	11,158.72	7,935.95	92.77	95.56	-90.00	-1,565.56	-3,488.58	2,356.88	2,170.31	186.56	12.633		
11,100.00	7,935.99	11,258.72	7,935.95	95.31	98.06	-90.00	-1,565.12	-3,588.58	2,356.88	2,165.21	191.67	12.297		
11,200.00	7,935.99	11,358.72	7,935.95	97.87	100.58	-90.00	-1,564.69	-3,688.58	2,356.88	2,160.09	196.79	11.977		
11,300.00	7,935.99	11,458.72	7,935.95	100.43	103.10	-90.00	-1,564.25	-3,788.58	2,356.88	2,154.96	201.92	11.672		
11,400.00	7,935.99	11,558.72	7,935.94	102.99	105.63	-90.00	-1,563.82	-3,888.58	2,356.89	2,149.82	207.07	11.382		
11,500.00	7,935.98	11,658.72	7,935.94	105.57	108.17	-90.00	-1,563.38	-3,988.58	2,356.89	2,144.66	212.23	11.106		
11,600.00	7,935.98	11,758.72	7,935.94	108.15	110.72	-90.00	-1,562.95	-4,088.58	2,356.89	2,139.50	217.39	10.842		
11,700.00	7,935.98	11,858.72	7,935.94	110.73	113.28	-90.00	-1,562.51	-4,188.58	2,356.89	2,134.32	222.57	10.589		
11,800.00	7,935.98	11,958.72	7,935.94	113.32	115.84	-90.00	-1,562.08	-4,288.57	2,356.90	2,129.13	227.76	10.348		
11,900.00	7,935.98	12,058.72	7,935.94	115.91	118.41	-90.00	-1,561.64	-4,388.57	2,356.90	2,123.94	232.96	10.117		
12,000.00	7,935.98	12,158.72	7,935.93	118.51	120.98	-90.00	-1,561.21	-4,488.57	2,356.90	2,118.74	238.16	9.896		
12,100.00	7,935.98	12,258.72	7,935.93	121.11	123.56	-90.00	-1,560.77	-4,588.57	2,356.90	2,113.53	243.38	9.684		
12,200.00	7,935.98	12,358.72	7,935.93	123.72	126.14	-90.00	-1,560.34	-4,688.57	2,356.91	2,108.31	248.60	9.481		
12,300.00	7,935.98	12,458.72	7,935.93	126.33	128.73	-90.00	-1,559.91	-4,788.57	2,356.91	2,103.09	253.82	9.286		
12,400.00	7,935.98	12,558.72	7,935.93	128.94	131.33	-90.00	-1,559.47	-4,888.57	2,356.91	2,097.85	259.06	9.098		
12,500.00	7,935.98	12,658.72	7,935.92	131.56	133.92	-90.00	-1,559.04	-4,988.57	2,356.91	2,092.62	264.30	8.918		
12,600.00	7,935.98	12,758.72	7,935.92	134.17	136.52	-90.00	-1,558.60	-5,088.57	2,356.92	2,087.37	269.54	8.744		
12,700.00	7,935.98	12,858.72	7,935.92	136.80	139.13	-90.00	-1,558.17	-5,188.57	2,356.92	2,082.13	274.79	8.577		
12,800.00	7,935.98	12,958.72	7,935.92	139.42	141.74	-90.00	-1,557.73	-5,288.57	2,356.92	2,076.87	280.05	8.416		
12,900.00	7,935.98	13,058.72	7,935.92	142.05	144.35	-90.00	-1,557.30	-5,388.56	2,356.92	2,071.62	285.31	8.261		
13,000.00	7,935.98	13,158.72	7,935.92	144.68	146.96	-90.00	-1,556.86	-5,488.56	2,356.93	2,066.35	290.57	8.111		
13,100.00	7,935.98	13,258.72	7,935.91	147.31	149.58	-90.00	-1,556.43	-5,588.56	2,356.93	2,061.09	295.84	7.967		
13,200.00	7,935.98	13,358.72	7,935.91	149.94	152.20	-90.00	-1,555.99	-5,688.56	2,356.93	2,055.82	301.12	7.827		
13,300.00	7,935.98	13,458.72	7,935.91	152.57	154.82	-90.00	-1,555.56	-5,788.56	2,356.93	2,050.54	306.39	7.693		
13,400.00	7,935.98	13,558.72	7,935.91	155.21	157.44	-90.00	-1,555.12	-5,888.56	2,356.94	2,045.26	311.67	7.562		
13,500.00	7,935.97	13,658.72	7,935.91	157.85	160.07	-90.00	-1,554.69	-5,988.56	2,356.94	2,039.98	316.96	7.436		
13,600.00	7,935.97	13,758.72	7,935.90	160.49	162.70	-90.00	-1,554.25	-6,088.56	2,356.94	2,034.70	322.24	7.314		
13,700.00	7,935.97	13,858.72	7,935.90	163.13	165.33	-90.00	-1,553.82	-6,188.56	2,356.95	2,029.41	327.53	7.196		
13,800.00	7,935.97	13,958.72	7,935.90	165.78	167.97	-90.00	-1,553.38	-6,288.56	2,356.95	2,024.12	332.83	7.082		
13,900.00	7,935.97	14,058.72	7,935.90	168.42	170.60	-90.00	-1,552.95	-6,388.55	2,356.95	2,018.83	338.12	6.971		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	7,935.97	14,158.72	7,935.90	171.07	173.24	-90.00	-1,552.52	-6,488.55	2,356.95	2,013.53	343.42	6.863		
14,100.00	7,935.97	14,258.72	7,935.90	173.72	175.88	-90.00	-1,552.08	-6,588.55	2,356.96	2,008.23	348.72	6.759		
14,200.00	7,935.97	14,358.72	7,935.89	176.36	178.52	-90.00	-1,551.65	-6,688.55	2,356.96	2,002.93	354.03	6.658		
14,300.00	7,935.97	14,458.72	7,935.89	179.02	181.16	-90.00	-1,551.21	-6,788.55	2,356.96	1,997.63	359.33	6.559		
14,400.00	7,935.97	14,558.72	7,935.89	181.67	183.81	-90.00	-1,550.78	-6,888.55	2,356.96	1,992.32	364.64	6.464		
14,500.00	7,935.97	14,658.72	7,935.89	184.32	186.45	-90.00	-1,550.34	-6,988.55	2,356.97	1,987.01	369.95	6.371		
14,600.00	7,935.97	14,758.72	7,935.89	186.97	189.10	-90.00	-1,549.91	-7,088.55	2,356.97	1,981.70	375.27	6.281		
14,700.00	7,935.97	14,858.72	7,935.88	189.63	191.74	-90.00	-1,549.47	-7,188.55	2,356.97	1,976.39	380.58	6.193		
14,800.00	7,935.97	14,958.72	7,935.88	192.28	194.39	-90.00	-1,549.04	-7,288.55	2,356.97	1,971.08	385.90	6.108		
14,900.00	7,935.97	15,058.72	7,935.88	194.94	197.04	-90.00	-1,548.60	-7,388.55	2,356.98	1,965.76	391.22	6.025		
15,000.00	7,935.97	15,158.72	7,935.88	197.60	199.70	-90.00	-1,548.17	-7,488.54	2,356.98	1,960.44	396.54	5.944		
15,100.00	7,935.97	15,258.72	7,935.88	200.26	202.35	-90.00	-1,547.73	-7,588.54	2,356.98	1,955.12	401.86	5.865		
15,200.00	7,935.97	15,358.72	7,935.88	202.91	205.00	-90.00	-1,547.30	-7,688.54	2,356.98	1,949.80	407.18	5.789		
15,300.00	7,935.97	15,458.72	7,935.87	205.57	207.66	-90.00	-1,546.86	-7,788.54	2,356.99	1,944.48	412.51	5.714		
15,400.00	7,935.97	15,558.72	7,935.87	208.24	210.31	-90.00	-1,546.43	-7,888.54	2,356.99	1,939.16	417.83	5.641		
15,500.00	7,935.97	15,658.72	7,935.87	210.90	212.97	-90.00	-1,545.99	-7,988.54	2,356.99	1,933.83	423.16	5.570		
15,600.00	7,935.96	15,758.72	7,935.87	213.56	215.63	-90.00	-1,545.56	-8,088.54	2,356.99	1,928.51	428.49	5.501		
15,700.00	7,935.96	15,858.72	7,935.87	216.22	218.29	-90.00	-1,545.13	-8,188.54	2,357.00	1,923.18	433.82	5.433		
15,800.00	7,935.96	15,958.72	7,935.86	218.89	220.95	-90.00	-1,544.69	-8,288.54	2,357.00	1,917.85	439.15	5.367		
15,900.00	7,935.96	16,058.72	7,935.86	221.55	223.61	-90.00	-1,544.26	-8,388.54	2,357.00	1,912.52	444.48	5.303		
16,000.00	7,935.96	16,158.72	7,935.86	224.21	226.27	-90.00	-1,543.82	-8,488.53	2,357.00	1,907.19	449.82	5.240		
16,100.00	7,935.96	16,258.72	7,935.86	226.88	228.93	-90.00	-1,543.39	-8,588.53	2,357.01	1,901.85	455.15	5.178		
16,200.00	7,935.96	16,358.72	7,935.86	229.55	231.59	-90.00	-1,542.95	-8,688.53	2,357.01	1,896.52	460.49	5.118		
16,300.00	7,935.96	16,458.72	7,935.86	232.21	234.25	-90.00	-1,542.52	-8,788.53	2,357.01	1,891.18	465.83	5.060		
16,400.00	7,935.96	16,558.72	7,935.85	234.88	236.92	-90.00	-1,542.08	-8,888.53	2,357.01	1,885.85	471.17	5.003		
16,500.00	7,935.96	16,658.72	7,935.85	237.55	239.58	-90.00	-1,541.65	-8,988.53	2,357.02	1,880.51	476.51	4.946		
16,600.00	7,935.96	16,758.72	7,935.85	240.21	242.25	-90.00	-1,541.21	-9,088.53	2,357.02	1,875.17	481.85	4.892		
16,700.00	7,935.96	16,858.72	7,935.85	242.88	244.91	-90.00	-1,540.78	-9,188.53	2,357.02	1,869.83	487.19	4.838		
16,800.00	7,935.96	16,958.72	7,935.85	245.55	247.58	-90.00	-1,540.34	-9,288.53	2,357.02	1,864.49	492.53	4.786		
16,900.00	7,935.96	17,058.72	7,935.84	248.22	250.25	-90.00	-1,539.91	-9,388.53	2,357.03	1,859.15	497.87	4.734		
17,000.00	7,935.96	17,158.72	7,935.84	250.89	252.92	-90.00	-1,539.47	-9,488.53	2,357.03	1,853.81	503.22	4.684		
17,100.00	7,935.96	17,258.72	7,935.84	253.56	255.58	-90.00	-1,539.04	-9,588.52	2,357.03	1,848.47	508.56	4.635		
17,200.00	7,935.96	17,358.72	7,935.84	256.23	258.25	-90.00	-1,538.61	-9,688.52	2,357.04	1,843.13	513.91	4.586		
17,300.00	7,935.96	17,458.72	7,935.84	258.90	260.92	-90.00	-1,538.17	-9,788.52	2,357.04	1,837.78	519.26	4.539		
17,400.00	7,935.96	17,558.72	7,935.84	261.58	263.59	-90.00	-1,537.74	-9,888.52	2,357.04	1,832.44	524.60	4.493		
17,500.00	7,935.96	17,658.72	7,935.83	264.25	266.26	-90.00	-1,537.30	-9,988.52	2,357.04	1,827.09	529.95	4.448		
17,600.00	7,935.96	17,758.72	7,935.83	266.92	268.93	-90.00	-1,536.87	-10,088.52	2,357.05	1,821.75	535.30	4.403		
17,700.00	7,935.95	17,858.72	7,935.83	269.59	271.60	-90.00	-1,536.43	-10,188.52	2,357.05	1,816.40	540.65	4.360		
17,800.00	7,935.95	17,958.72	7,935.83	272.26	274.27	-90.00	-1,536.00	-10,288.52	2,357.05	1,811.05	546.00	4.317		
17,900.00	7,935.95	18,058.72	7,935.83	274.94	276.95	-90.00	-1,535.56	-10,388.52	2,357.05	1,805.70	551.35	4.275		
17,989.78	7,935.95	18,155.23	7,936.01	277.34	279.53	-90.00	-1,534.98	-10,485.03	2,356.91	1,800.60	556.31	4.237		
17,997.91	7,936.00	18,153.00	7,936.00	277.56	279.47	-90.00	-1,535.00	-10,482.80	2,356.82	1,800.32	556.50	4.235 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	146.25	146.25					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	146.25	146.25	145.98	0.27	543.974		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	146.25	146.25	145.26	0.99	148.357		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	146.25	146.25	144.55	1.70	85.891		
400.00	400.00	400.91	400.89	1.21	1.20	90.69	-1.75	145.92	145.93	143.53	2.41	60.632		
500.00	500.00	501.57	501.41	1.57	1.54	92.75	-6.97	144.94	145.11	142.00	3.11	46.679		
600.00	600.00	601.74	601.18	1.93	1.90	96.21	-15.60	143.31	144.16	140.34	3.83	37.661		
692.76	692.76	694.00	692.76	2.26	2.25	100.66	-26.58	141.25	143.73	139.21	4.51	31.854 CC		
700.00	700.00	701.17	699.86	2.29	2.28	101.05	-27.56	141.06	143.73	139.16	4.57	31.482 ES		
800.00	800.00	799.64	797.11	2.64	2.68	107.17	-42.71	138.21	144.69	139.36	5.32	27.179		
900.00	899.98	896.59	892.29	3.00	3.11	130.52	-60.83	134.80	149.22	143.12	6.10	24.480		
1,000.00	999.84	991.22	984.54	3.36	3.55	139.10	-81.55	130.90	160.19	153.33	6.87	23.334		
1,100.00	1,099.45	1,083.00	1,073.29	3.72	4.02	147.63	-104.50	126.58	179.20	171.59	7.61	23.552		
1,173.53	1,172.47	1,148.38	1,136.03	3.99	4.37	153.34	-122.55	123.18	198.69	190.57	8.13	24.441		
1,200.00	1,198.72	1,171.49	1,158.11	4.09	4.50	155.31	-129.27	121.92	206.75	198.43	8.31	24.874		
1,300.00	1,297.87	1,259.72	1,241.97	4.47	5.01	161.91	-156.23	116.85	240.20	231.22	8.98	26.739		
1,400.00	1,397.02	1,350.16	1,327.80	4.85	5.55	167.13	-184.23	111.58	276.41	266.74	9.67	28.583		
1,500.00	1,496.17	1,440.59	1,413.63	5.24	6.09	171.19	-212.23	106.31	314.24	303.88	10.36	30.341		
1,600.00	1,595.32	1,531.03	1,499.46	5.63	6.65	174.39	-240.23	101.04	353.18	342.14	11.05	31.976		
1,700.00	1,694.47	1,621.46	1,585.29	6.03	7.20	176.97	-268.23	95.77	392.90	381.16	11.74	33.476		
1,800.00	1,793.62	1,711.90	1,671.12	6.43	7.77	179.08	-296.23	90.50	433.18	420.75	12.43	34.845		
1,900.00	1,892.78	1,802.33	1,756.95	6.83	8.33	-179.16	-324.23	85.23	473.88	460.75	13.13	36.092		
2,000.00	1,991.93	1,907.23	1,842.78	7.23	8.99	-177.67	-352.23	79.96	514.90	501.00	13.90	37.053		
2,100.00	2,091.08	1,983.21	1,928.61	7.63	9.47	-176.40	-380.23	74.69	556.17	541.64	14.54	38.264		
2,200.00	2,190.23	2,073.64	2,014.44	8.04	10.04	-175.31	-408.23	69.42	597.64	582.40	15.24	39.211		
2,300.00	2,289.38	2,164.08	2,100.27	8.44	10.62	-174.35	-436.22	64.15	639.27	623.32	15.95	40.079		
2,400.00	2,388.53	2,254.51	2,186.10	8.85	11.19	-173.52	-464.22	58.88	681.02	664.36	16.66	40.875		
2,500.00	2,487.68	2,344.95	2,271.93	9.25	11.77	-172.77	-492.22	53.61	722.89	705.51	17.37	41.609		
2,600.00	2,586.83	2,435.38	2,357.76	9.66	12.34	-172.11	-520.22	48.34	764.84	746.76	18.09	42.286		
2,700.00	2,685.99	2,525.82	2,443.59	10.07	12.92	-171.52	-548.22	43.07	806.87	788.07	18.80	42.912		
2,800.00	2,785.14	2,616.25	2,529.42	10.48	13.50	-170.98	-576.22	37.80	848.97	829.45	19.52	43.493		
2,900.00	2,884.29	2,706.69	2,615.25	10.89	14.08	-170.50	-604.22	32.53	891.12	870.88	20.24	44.034		
3,000.00	2,983.44	2,802.87	2,701.08	11.30	14.70	-170.06	-632.22	27.26	933.32	912.34	20.98	44.483		
3,100.00	3,082.59	2,887.56	2,786.91	11.71	15.24	-169.66	-660.22	21.99	975.56	953.88	21.68	45.006		
3,200.00	3,181.74	2,978.00	2,872.74	12.12	15.82	-169.29	-688.22	16.72	1,017.84	995.44	22.40	45.445		
3,300.00	3,280.89	3,068.43	2,958.57	12.53	16.40	-168.95	-716.22	11.45	1,060.14	1,037.03	23.12	45.857		
3,400.00	3,380.04	3,158.87	3,044.40	12.94	16.98	-168.63	-744.22	6.18	1,102.48	1,078.64	23.84	46.243		
3,500.00	3,479.20	3,249.30	3,130.23	13.35	17.56	-168.34	-772.22	0.91	1,144.84	1,120.28	24.56	46.607		
3,600.00	3,578.35	3,339.74	3,216.06	13.76	18.14	-168.07	-800.22	-4.36	1,187.23	1,161.94	25.29	46.949		
3,700.00	3,677.50	3,430.18	3,301.90	14.17	18.72	-167.82	-828.22	-9.63	1,229.63	1,203.62	26.01	47.272		
3,800.00	3,776.65	3,520.61	3,387.73	14.58	19.31	-167.58	-856.22	-14.90	1,272.06	1,245.32	26.74	47.577		
3,900.00	3,875.80	3,611.05	3,473.56	14.99	19.89	-167.36	-884.22	-20.17	1,314.50	1,287.04	27.46	47.865		
4,000.00	3,974.95	3,701.48	3,559.39	15.41	20.47	-167.16	-912.22	-25.44	1,356.95	1,328.77	28.19	48.139		
4,100.00	4,074.10	3,808.08	3,645.22	15.82	21.16	-166.96	-940.22	-30.71	1,399.42	1,370.44	28.99	48.281		
4,200.00	4,173.25	3,882.35	3,731.05	16.23	21.64	-166.78	-968.22	-35.98	1,441.90	1,412.26	29.64	48.644		
4,300.00	4,272.40	3,972.79	3,816.88	16.64	22.22	-166.61	-996.21	-41.25	1,484.40	1,454.03	30.37	48.878		
4,400.00	4,371.56	4,063.22	3,902.71	17.06	22.80	-166.45	-1,024.21	-46.52	1,526.90	1,495.80	31.10	49.101		
4,500.00	4,470.71	4,153.66	3,988.54	17.47	23.38	-166.29	-1,052.21	-51.79	1,569.41	1,537.59	31.83	49.313		
4,600.00	4,569.86	4,244.10	4,074.37	17.88	23.97	-166.15	-1,080.21	-57.05	1,611.93	1,579.38	32.55	49.515		
4,700.00	4,669.01	4,334.53	4,160.20	18.29	24.55	-166.01	-1,108.21	-62.32	1,654.46	1,621.18	33.28	49.709		
4,800.00	4,768.16	4,424.97	4,246.03	18.71	25.13	-165.88	-1,136.21	-67.59	1,697.00	1,662.98	34.01	49.893		
4,900.00	4,867.31	4,515.40	4,331.86	19.12	25.72	-165.75	-1,164.21	-72.86	1,739.54	1,704.80	34.74	50.070		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,605.84	4,417.69	19.53	26.30	-165.64	-1,192.21	-78.13	1,782.09	1,746.62	35.47	50.238		
5,100.00	5,065.61	4,696.27	4,503.52	19.95	26.88	-165.52	-1,220.21	-83.40	1,824.65	1,788.44	36.20	50.400		
5,200.00	5,164.77	4,786.71	4,589.35	20.36	27.47	-165.41	-1,248.21	-88.67	1,867.21	1,830.27	36.93	50.555		
5,300.00	5,263.92	4,877.14	4,675.18	20.77	28.05	-165.31	-1,276.21	-93.94	1,909.77	1,872.11	37.67	50.704		
5,400.00	5,363.07	4,967.58	4,761.01	21.18	28.64	-165.21	-1,304.21	-99.21	1,952.35	1,913.95	38.40	50.846		
5,500.00	5,462.22	5,058.02	4,846.84	21.60	29.22	-165.12	-1,332.21	-104.48	1,994.92	1,955.79	39.13	50.983		
5,600.00	5,561.37	5,148.45	4,932.67	22.01	29.80	-165.03	-1,360.21	-109.75	2,037.50	1,997.64	39.86	51.115		
5,700.00	5,660.52	5,238.89	5,018.50	22.43	30.39	-164.94	-1,388.21	-115.02	2,080.09	2,039.49	40.59	51.241		
5,800.00	5,759.67	5,329.32	5,104.33	22.84	30.97	-164.86	-1,416.21	-120.29	2,122.67	2,081.35	41.33	51.363		
5,900.00	5,858.82	5,419.76	5,190.16	23.25	31.56	-164.78	-1,444.21	-125.56	2,165.27	2,123.21	42.06	51.480		
6,000.00	5,957.97	5,510.19	5,275.99	23.67	32.14	-164.70	-1,472.21	-130.83	2,207.86	2,165.07	42.79	51.593		
6,100.00	6,057.13	5,600.63	5,361.82	24.08	32.72	-164.63	-1,500.21	-136.10	2,250.46	2,206.93	43.53	51.702		
6,200.00	6,156.28	5,708.94	5,447.65	24.49	33.42	-164.55	-1,528.21	-141.37	2,293.06	2,248.72	44.34	51.717		
6,300.00	6,255.43	5,781.50	5,533.48	24.91	33.89	-164.49	-1,556.21	-146.64	2,335.66	2,290.67	45.00	51.908		
6,400.00	6,354.58	5,871.94	5,619.32	25.32	34.48	-164.42	-1,584.20	-151.91	2,378.27	2,332.54	45.73	52.006		
6,500.00	6,453.73	5,962.37	5,705.15	25.73	35.06	-164.36	-1,612.20	-157.18	2,420.88	2,374.41	46.47	52.100		
6,600.00	6,552.88	6,052.81	5,790.98	26.15	35.65	-164.29	-1,640.20	-162.45	2,463.49	2,416.29	47.20	52.191		
6,700.00	6,652.03	6,143.24	5,876.81	26.56	36.23	-164.23	-1,668.20	-167.72	2,506.10	2,458.17	47.94	52.279		
6,800.00	6,751.18	6,233.68	5,962.64	26.98	36.81	-164.18	-1,696.20	-172.99	2,548.72	2,500.05	48.67	52.364		
6,900.00	6,850.34	6,324.11	6,048.47	27.39	37.40	-164.12	-1,724.20	-178.26	2,591.34	2,541.93	49.41	52.446		
7,000.00	6,949.49	6,414.55	6,134.30	27.80	37.98	-164.07	-1,752.20	-183.53	2,633.96	2,583.81	50.15	52.525		
7,011.14	6,960.53	6,424.62	6,143.86	27.85	38.05	-164.06	-1,755.32	-184.12	2,638.71	2,588.48	50.23	52.534		
7,100.00	7,048.80	6,505.53	6,220.64	28.21	38.57	-164.23	-1,780.37	-188.83	2,675.38	2,624.49	50.88	52.579		
7,200.00	7,148.46	6,602.20	6,308.22	28.58	39.20	-164.37	-1,808.94	-194.21	2,713.74	2,662.10	51.64	52.553		
7,300.00	7,248.35	7,300.00	6,553.46	28.94	43.28	-164.31	-1,882.81	-208.11	2,748.00	2,692.66	55.34	49.661		
7,384.67	7,333.00	7,642.45	7,333.19	29.21	43.73	-179.88	-1,976.85	-226.07	2,753.91	2,697.05	56.86	48.435		
7,400.00	7,348.33	7,657.93	7,348.65	29.26	43.77	-179.86	-1,976.85	-226.74	2,753.91	2,696.95	56.96	48.352		
7,414.67	7,363.00	7,672.69	7,363.38	29.31	43.80	-179.84	-1,976.84	-227.77	2,753.90	2,696.85	57.05	48.272		
7,450.00	7,398.31	7,708.09	7,398.55	29.42	43.88	-90.03	-1,976.83	-231.79	2,753.90	2,696.62	57.28	48.079		
7,471.91	7,420.15	7,729.96	7,420.12	29.49	43.93	-89.99	-1,976.81	-235.35	2,753.90	2,696.47	57.43	47.955		
7,500.00	7,448.02	7,757.88	7,447.44	29.58	44.00	-89.94	-1,976.78	-241.09	2,753.90	2,696.28	57.62	47.796		
7,550.00	7,497.08	7,807.32	7,495.01	29.75	44.13	-89.86	-1,976.72	-254.49	2,753.91	2,695.93	57.98	47.500		
7,600.00	7,545.12	7,856.42	7,540.94	29.93	44.26	-89.78	-1,976.65	-271.81	2,753.92	2,695.56	58.36	47.191		
7,650.00	7,591.77	7,905.19	7,584.93	30.11	44.40	-89.69	-1,976.55	-292.84	2,753.94	2,695.18	58.76	46.869		
7,700.00	7,636.69	7,953.65	7,626.70	30.30	44.54	-89.62	-1,976.45	-317.36	2,753.96	2,694.77	59.19	46.531		
7,750.00	7,679.52	8,001.81	7,666.02	30.49	44.68	-89.54	-1,976.32	-345.14	2,753.98	2,694.34	59.64	46.175		
7,800.00	7,719.94	8,049.69	7,702.67	30.70	44.83	-89.47	-1,976.19	-375.94	2,754.01	2,693.87	60.14	45.795		
7,850.00	7,757.65	8,097.32	7,736.44	30.91	44.98	-89.40	-1,976.04	-409.50	2,754.04	2,693.36	60.68	45.387		
7,900.00	7,792.35	8,144.70	7,767.16	31.14	45.14	-89.33	-1,975.88	-445.56	2,754.07	2,692.80	61.27	44.946		
7,950.00	7,823.79	8,191.87	7,794.68	31.39	45.30	-89.27	-1,975.71	-483.85	2,754.11	2,692.17	61.93	44.469		
8,000.00	7,851.72	8,238.84	7,818.86	31.67	45.48	-89.22	-1,975.53	-524.10	2,754.14	2,691.48	62.66	43.953		
8,050.00	7,875.93	8,285.63	7,839.59	31.99	45.66	-89.17	-1,975.34	-566.04	2,754.17	2,690.70	63.47	43.397		
8,100.00	7,896.23	8,332.26	7,856.78	32.35	45.86	-89.13	-1,975.15	-609.38	2,754.20	2,689.85	64.35	42.801		
8,150.00	7,912.48	8,378.77	7,870.36	32.75	46.07	-89.09	-1,974.96	-653.84	2,754.22	2,688.91	65.31	42.169		
8,200.00	7,924.55	8,425.16	7,880.27	33.20	46.30	-89.06	-1,974.75	-699.15	2,754.24	2,687.89	66.36	41.508		
8,250.00	7,932.35	8,471.47	7,886.47	33.70	46.54	-89.04	-1,974.55	-745.03	2,754.26	2,686.79	67.47	40.823		
8,300.00	7,935.81	8,517.71	7,888.95	34.24	46.80	-89.03	-1,974.35	-791.19	2,754.27	2,685.63	68.64	40.126		
8,314.73	7,936.00	8,531.82	7,889.00	34.41	46.89	-89.02	-1,974.28	-805.30	2,754.27	2,685.26	69.00	39.915		
8,400.00	7,936.00	8,617.08	7,889.00	35.44	47.44	-89.02	-1,973.91	-890.56	2,754.26	2,682.99	71.27	38.646		
8,500.00	7,936.00	8,717.08	7,889.00	36.82	48.20	-89.02	-1,973.46	-990.55	2,754.26	2,680.06	74.19	37.122		
8,600.00	7,936.00	8,817.07	7,889.00	38.34	49.09	-89.02	-1,973.02	-1,090.55	2,754.25	2,676.87	77.38	35.592		
8,700.00	7,936.00	8,917.07	7,889.00	39.99	50.10	-89.02	-1,972.58	-1,190.54	2,754.25	2,673.44	80.81	34.084		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.00	7,936.00	9,017.07	7,888.99	41.75	51.26	-89.02	-1,972.14	-1,290.54	2,754.24	2,669.81	84.44	32.620		
8,900.00	7,936.00	9,117.06	7,888.99	43.62	52.54	-89.02	-1,971.69	-1,390.53	2,754.24	2,665.99	88.24	31.212		
9,000.00	7,936.00	9,217.06	7,888.99	45.56	53.96	-89.02	-1,971.25	-1,490.53	2,754.23	2,662.02	92.21	29.870		
9,100.00	7,936.00	9,317.05	7,888.99	47.59	55.50	-89.02	-1,970.81	-1,590.52	2,754.23	2,657.92	96.31	28.598		
9,200.00	7,936.00	9,417.05	7,888.99	49.67	57.15	-89.02	-1,970.37	-1,690.52	2,754.22	2,653.69	100.53	27.397		
9,300.00	7,936.00	9,517.05	7,888.99	51.82	58.91	-89.02	-1,969.93	-1,790.51	2,754.22	2,649.36	104.86	26.266		
9,400.00	7,935.99	9,617.04	7,888.99	54.01	60.75	-89.02	-1,969.48	-1,890.51	2,754.21	2,644.93	109.28	25.202		
9,500.00	7,935.99	9,717.04	7,888.99	56.25	62.67	-89.02	-1,969.04	-1,990.50	2,754.21	2,640.42	113.79	24.205		
9,600.00	7,935.99	9,817.04	7,888.99	58.53	64.66	-89.02	-1,968.60	-2,090.50	2,754.21	2,635.84	118.37	23.268		
9,700.00	7,935.99	9,917.03	7,888.99	60.84	66.72	-89.02	-1,968.16	-2,190.49	2,754.20	2,631.19	123.01	22.390		
9,800.00	7,935.99	10,017.03	7,888.98	63.18	68.83	-89.02	-1,967.72	-2,290.49	2,754.20	2,626.49	127.71	21.566		
9,900.00	7,935.99	10,117.02	7,888.98	65.55	70.99	-89.02	-1,967.28	-2,390.49	2,754.19	2,621.73	132.47	20.792		
10,000.00	7,935.99	10,217.02	7,888.98	67.94	73.20	-89.02	-1,966.84	-2,490.48	2,754.19	2,616.92	137.27	20.065		
10,100.00	7,935.99	10,317.02	7,888.98	70.35	75.44	-89.02	-1,966.40	-2,590.48	2,754.19	2,612.08	142.11	19.381		
10,200.00	7,935.99	10,417.01	7,888.98	72.79	77.72	-89.02	-1,965.96	-2,690.47	2,754.18	2,607.20	146.99	18.738		
10,300.00	7,935.99	10,517.01	7,888.98	75.24	80.02	-89.02	-1,965.52	-2,790.47	2,754.18	2,602.28	151.90	18.132		
10,400.00	7,935.99	10,617.00	7,888.98	77.70	82.36	-89.02	-1,965.08	-2,890.46	2,754.18	2,597.33	156.84	17.560		
10,500.00	7,935.99	10,717.00	7,888.98	80.19	84.72	-89.02	-1,964.64	-2,990.46	2,754.18	2,592.36	161.82	17.021		
10,600.00	7,935.99	10,817.00	7,888.98	82.68	87.10	-89.02	-1,964.20	-3,090.45	2,754.17	2,587.36	166.81	16.511		
10,700.00	7,935.99	10,916.99	7,888.98	85.19	89.50	-89.02	-1,963.76	-3,190.45	2,754.17	2,582.34	171.83	16.028		
10,800.00	7,935.99	11,016.99	7,888.98	87.70	91.92	-89.02	-1,963.32	-3,290.44	2,754.17	2,577.29	176.87	15.571		
10,900.00	7,935.99	11,116.99	7,888.98	90.23	94.36	-89.02	-1,962.88	-3,390.44	2,754.17	2,572.23	181.94	15.138		
11,000.00	7,935.99	11,216.98	7,888.98	92.77	96.81	-89.02	-1,962.44	-3,490.43	2,754.16	2,567.15	187.01	14.727		
11,100.00	7,935.99	11,316.98	7,888.98	95.31	99.28	-89.02	-1,962.00	-3,590.43	2,754.16	2,562.05	192.11	14.336		
11,200.00	7,935.99	11,416.97	7,888.98	97.87	101.75	-89.02	-1,961.56	-3,690.42	2,754.16	2,556.94	197.22	13.965		
11,300.00	7,935.99	11,516.97	7,888.97	100.43	104.25	-89.02	-1,961.12	-3,790.42	2,754.16	2,551.81	202.35	13.611		
11,400.00	7,935.99	11,616.97	7,888.97	102.99	106.75	-89.02	-1,960.68	-3,890.41	2,754.16	2,546.67	207.48	13.274		
11,500.00	7,935.98	11,716.96	7,888.97	105.57	109.26	-89.02	-1,960.24	-3,990.41	2,754.16	2,541.52	212.63	12.953		
11,600.00	7,935.98	11,816.96	7,888.97	108.15	111.78	-89.02	-1,959.81	-4,090.40	2,754.15	2,536.36	217.80	12.646		
11,700.00	7,935.98	11,916.95	7,888.97	110.73	114.31	-89.02	-1,959.37	-4,190.40	2,754.15	2,531.19	222.97	12.352		
11,800.00	7,935.98	12,016.95	7,888.97	113.32	116.84	-89.02	-1,958.93	-4,290.39	2,754.15	2,526.00	228.15	12.072		
11,900.00	7,935.98	12,116.95	7,888.97	115.91	119.39	-89.02	-1,958.49	-4,390.39	2,754.15	2,520.81	233.34	11.803		
12,000.00	7,935.98	12,216.94	7,888.97	118.51	121.94	-89.02	-1,958.05	-4,490.38	2,754.15	2,515.61	238.54	11.546		
12,100.00	7,935.98	12,316.94	7,888.97	121.11	124.50	-89.02	-1,957.61	-4,590.38	2,754.15	2,510.41	243.74	11.299		
12,200.00	7,935.98	12,416.94	7,888.97	123.72	127.06	-89.02	-1,957.18	-4,690.37	2,754.15	2,505.19	248.96	11.063		
12,300.00	7,935.98	12,516.93	7,888.97	126.33	129.63	-89.02	-1,956.74	-4,790.37	2,754.15	2,499.97	254.18	10.835		
12,400.00	7,935.98	12,616.93	7,888.97	128.94	132.21	-89.02	-1,956.30	-4,890.36	2,754.15	2,494.74	259.41	10.617		
12,473.29	7,935.98	12,709.79	7,888.97	130.86	134.60	-89.02	-1,955.98	-4,963.65	2,754.15	2,490.39	263.75	10.442		
12,500.00	7,935.98	12,716.92	7,888.97	131.56	134.79	-89.02	-1,955.87	-4,990.36	2,754.15	2,489.51	264.64	10.407		
12,600.00	7,935.98	12,816.92	7,888.97	134.17	137.37	-89.02	-1,955.43	-5,090.36	2,754.15	2,484.27	269.88	10.205		
12,700.00	7,935.98	12,916.92	7,888.97	136.80	139.96	-89.02	-1,954.99	-5,190.35	2,754.15	2,479.02	275.13	10.010		
12,800.00	7,935.98	13,016.91	7,888.97	139.42	142.55	-89.02	-1,954.55	-5,290.35	2,754.15	2,473.77	280.38	9.823		
12,900.00	7,935.98	13,116.91	7,888.97	142.05	145.15	-89.02	-1,954.12	-5,390.34	2,754.15	2,468.52	285.63	9.642		
13,000.00	7,935.98	13,216.90	7,888.97	144.68	147.75	-89.02	-1,953.68	-5,490.34	2,754.15	2,463.26	290.89	9.468		
13,100.00	7,935.98	13,316.90	7,888.97	147.31	150.35	-89.02	-1,953.24	-5,590.33	2,754.15	2,458.00	296.16	9.300		
13,200.00	7,935.98	13,416.90	7,888.97	149.94	152.96	-89.02	-1,952.81	-5,690.33	2,754.15	2,452.73	301.43	9.137		
13,300.00	7,935.98	13,516.89	7,888.97	152.57	155.57	-89.02	-1,952.37	-5,790.32	2,754.15	2,447.46	306.70	8.980		
13,400.00	7,935.98	13,616.89	7,888.97	155.21	158.18	-89.02	-1,951.94	-5,890.32	2,754.16	2,442.18	311.97	8.828		
13,500.00	7,935.97	13,716.89	7,888.97	157.85	160.80	-89.02	-1,951.50	-5,990.31	2,754.16	2,436.90	317.25	8.681		
13,600.00	7,935.97	13,816.88	7,888.97	160.49	163.42	-89.02	-1,951.06	-6,090.31	2,754.16	2,431.62	322.54	8.539		
13,700.00	7,935.97	13,916.88	7,888.97	163.13	166.04	-89.02	-1,950.63	-6,190.30	2,754.16	2,426.34	327.82	8.401		
13,800.00	7,935.97	14,016.87	7,888.97	165.78	168.66	-89.02	-1,950.19	-6,290.30	2,754.16	2,421.05	333.11	8.268		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-11 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (usft)	Vertical Depth (usft)	Measured Depth Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	7,935.97	14,116.87	7,888.97	168.42	171.28	-89.02	-1,949.76	-6,390.29	2,754.16	2,415.76	338.41	8.139		
14,000.00	7,935.97	14,216.87	7,888.97	171.07	173.91	-89.02	-1,949.32	-6,490.29	2,754.17	2,410.47	343.70	8.013		
14,100.00	7,935.97	14,316.86	7,888.97	173.72	176.54	-89.02	-1,948.89	-6,590.28	2,754.17	2,405.17	349.00	7.892		
14,200.00	7,935.97	14,416.86	7,888.97	176.36	179.17	-89.02	-1,948.45	-6,690.28	2,754.17	2,399.87	354.30	7.774		
14,300.00	7,935.97	14,516.85	7,888.97	179.02	181.81	-89.02	-1,948.02	-6,790.27	2,754.17	2,394.57	359.60	7.659		
14,400.00	7,935.97	14,616.85	7,888.97	181.67	184.44	-89.02	-1,947.58	-6,890.27	2,754.18	2,389.27	364.91	7.548		
14,500.00	7,935.97	14,716.85	7,888.97	184.32	187.08	-89.02	-1,947.15	-6,990.26	2,754.18	2,383.97	370.21	7.439		
14,600.00	7,935.97	14,816.84	7,888.97	186.97	189.72	-89.02	-1,946.72	-7,090.26	2,754.18	2,378.66	375.52	7.334		
14,700.00	7,935.97	14,916.84	7,888.97	189.63	192.36	-89.02	-1,946.28	-7,190.25	2,754.18	2,373.35	380.83	7.232		
14,800.00	7,935.97	15,016.84	7,888.97	192.28	195.00	-89.02	-1,945.85	-7,290.25	2,754.19	2,368.04	386.15	7.132		
14,900.00	7,935.97	15,116.83	7,888.97	194.94	197.64	-89.02	-1,945.41	-7,390.24	2,754.19	2,362.73	391.46	7.036		
15,000.00	7,935.97	15,216.83	7,888.97	197.60	200.29	-89.02	-1,944.98	-7,490.24	2,754.19	2,357.41	396.78	6.941		
15,100.00	7,935.97	15,316.82	7,888.98	200.26	202.93	-89.02	-1,944.55	-7,590.24	2,754.20	2,352.10	402.10	6.850		
15,200.00	7,935.97	15,416.82	7,888.98	202.91	205.58	-89.02	-1,944.11	-7,690.23	2,754.20	2,346.78	407.42	6.760		
15,300.00	7,935.97	15,516.82	7,888.98	205.57	208.23	-89.02	-1,943.68	-7,790.23	2,754.21	2,341.46	412.74	6.673		
15,400.00	7,935.97	15,616.81	7,888.98	208.24	210.88	-89.02	-1,943.25	-7,890.22	2,754.21	2,336.15	418.07	6.588		
15,500.00	7,935.97	15,716.81	7,888.98	210.90	213.53	-89.02	-1,942.81	-7,990.22	2,754.21	2,330.82	423.39	6.505		
15,600.00	7,935.96	15,816.80	7,888.98	213.56	216.18	-89.02	-1,942.38	-8,090.21	2,754.22	2,325.50	428.72	6.424		
15,700.00	7,935.96	15,916.80	7,888.98	216.22	218.83	-89.02	-1,941.95	-8,190.21	2,754.22	2,320.18	434.04	6.345		
15,800.00	7,935.96	16,016.80	7,888.98	218.89	221.49	-89.02	-1,941.52	-8,290.20	2,754.23	2,314.85	439.37	6.269		
15,900.00	7,935.96	16,116.79	7,888.98	221.55	224.14	-89.02	-1,941.08	-8,390.20	2,754.23	2,309.53	444.70	6.193		
16,000.00	7,935.96	16,216.79	7,888.98	224.21	226.80	-89.02	-1,940.65	-8,490.19	2,754.24	2,304.20	450.04	6.120		
16,100.00	7,935.96	16,316.79	7,888.98	226.88	229.45	-89.02	-1,940.22	-8,590.19	2,754.24	2,298.87	455.37	6.048		
16,200.00	7,935.96	16,416.78	7,888.98	229.55	232.11	-89.02	-1,939.79	-8,690.18	2,754.25	2,293.55	460.70	5.978		
16,300.00	7,935.96	16,516.78	7,888.98	232.21	234.77	-89.02	-1,939.35	-8,790.18	2,754.25	2,288.22	466.04	5.910		
16,400.00	7,935.96	16,616.77	7,888.98	234.88	237.43	-89.02	-1,938.92	-8,890.17	2,754.26	2,282.88	471.37	5.843		
16,500.00	7,935.96	16,716.77	7,888.98	237.55	240.09	-89.02	-1,938.49	-8,990.17	2,754.26	2,277.55	476.71	5.778		
16,600.00	7,935.96	16,816.77	7,888.99	240.21	242.75	-89.02	-1,938.06	-9,090.16	2,754.27	2,272.22	482.05	5.714		
16,700.00	7,935.96	16,916.76	7,888.99	242.88	245.41	-89.02	-1,937.63	-9,190.16	2,754.28	2,266.89	487.39	5.651		
16,800.00	7,935.96	17,016.76	7,888.99	245.55	248.07	-89.02	-1,937.20	-9,290.15	2,754.28	2,261.55	492.73	5.590		
16,900.00	7,935.96	17,116.75	7,888.99	248.22	250.73	-89.02	-1,936.77	-9,390.15	2,754.29	2,256.22	498.07	5.530		
17,000.00	7,935.96	17,216.75	7,888.99	250.89	253.40	-89.02	-1,936.34	-9,490.14	2,754.29	2,250.88	503.41	5.471		
17,100.00	7,935.96	17,316.75	7,888.99	253.56	256.06	-89.02	-1,935.90	-9,590.14	2,754.30	2,245.55	508.75	5.414		
17,200.00	7,935.96	17,416.74	7,888.99	256.23	258.73	-89.02	-1,935.47	-9,690.13	2,754.31	2,240.21	514.10	5.358		
17,300.00	7,935.96	17,516.74	7,888.99	258.90	261.39	-89.02	-1,935.04	-9,790.13	2,754.31	2,234.87	519.44	5.302		
17,400.00	7,935.96	17,616.74	7,888.99	261.58	264.06	-89.02	-1,934.61	-9,890.13	2,754.32	2,229.53	524.79	5.248		
17,500.00	7,935.96	17,716.73	7,888.99	264.25	266.72	-89.02	-1,934.18	-9,990.12	2,754.33	2,224.20	530.13	5.196		
17,600.00	7,935.96	17,816.73	7,889.00	266.92	269.39	-89.02	-1,933.75	-10,090.12	2,754.34	2,218.86	535.48	5.144		
17,700.00	7,935.95	17,916.72	7,889.00	269.59	272.06	-89.02	-1,933.32	-10,190.11	2,754.34	2,213.52	540.83	5.093		
17,800.00	7,935.95	18,016.72	7,889.00	272.26	274.73	-89.02	-1,932.89	-10,290.11	2,754.35	2,208.18	546.17	5.043		
17,900.00	7,935.95	18,116.72	7,889.00	274.94	277.39	-89.02	-1,932.46	-10,390.10	2,754.36	2,202.83	551.52	4.994		
17,986.13	7,935.95	18,202.84	7,889.00	277.24	279.69	-89.02	-1,932.09	-10,476.23	2,754.36	2,198.23	556.13	4.953		
17,997.91	7,936.00	18,212.39	7,889.00	277.56	279.95	-89.02	-1,932.05	-10,485.77	2,754.28	2,197.57	556.71	4.947 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-12 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	163.12	163.12					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	163.12	163.12	162.86	0.27	606.740		
200.00	200.00	200.89	200.87	0.49	0.49	90.62	-1.75	162.84	162.85	161.87	0.98	166.501		
300.00	300.00	301.54	301.37	0.85	0.85	92.47	-6.99	161.97	162.13	160.43	1.70	95.532		
400.00	400.00	401.69	401.13	1.21	1.22	95.57	-15.66	160.54	161.31	158.87	2.43	66.253		
489.21	489.21	490.42	489.21	1.53	1.58	99.37	-26.21	158.80	160.95	157.84	3.11	51.739 CC		
500.00	500.00	501.10	499.79	1.57	1.62	99.90	-27.66	158.56	160.95	157.76	3.19	50.415 ES		
600.00	600.00	599.55	597.03	1.93	2.05	105.36	-42.86	156.05	161.86	157.89	3.97	40.753		
700.00	700.00	696.83	692.52	2.29	2.49	111.77	-61.12	153.04	164.96	160.19	4.77	34.587		
800.00	800.00	792.73	786.00	2.64	2.97	118.80	-82.23	149.55	171.24	165.67	5.57	30.722		
900.00	899.98	886.63	876.78	3.00	3.47	142.00	-105.89	145.65	182.92	176.56	6.37	28.734		
1,000.00	999.84	977.71	964.04	3.36	3.99	149.38	-131.63	141.40	202.37	195.25	7.12	28.412		
1,100.00	1,099.45	1,065.49	1,047.31	3.72	4.53	156.10	-159.01	136.88	230.13	222.29	7.83	29.380		
1,173.53	1,172.47	1,127.70	1,105.80	3.99	4.93	160.43	-179.93	133.43	255.74	247.42	8.33	30.718		
1,200.00	1,198.72	1,149.64	1,126.31	4.09	5.07	161.91	-187.61	132.16	265.89	257.39	8.50	31.285		
1,300.00	1,297.87	1,233.31	1,204.04	4.47	5.64	166.93	-218.17	127.12	306.85	297.72	9.13	33.598		
1,400.00	1,397.02	1,320.78	1,285.10	4.85	6.25	171.06	-250.59	121.77	350.04	340.24	9.81	35.700		
1,500.00	1,496.17	1,408.25	1,366.16	5.24	6.87	174.32	-283.01	116.42	394.47	383.99	10.48	37.638		
1,600.00	1,595.32	1,504.28	1,447.22	5.63	7.55	176.94	-315.43	111.07	439.75	428.54	11.20	39.253		
1,700.00	1,694.47	1,583.18	1,528.28	6.03	8.12	179.08	-347.86	105.72	485.64	473.80	11.84	41.002		
1,800.00	1,793.62	1,670.65	1,609.34	6.43	8.74	-179.14	-380.28	100.37	532.00	519.46	12.53	42.447		
1,900.00	1,892.78	1,758.12	1,690.40	6.83	9.37	-177.64	-412.70	95.01	578.70	565.47	13.23	43.755		
2,000.00	1,991.93	1,845.58	1,771.46	7.23	10.01	-176.36	-445.13	89.66	625.67	611.74	13.92	44.940		
2,100.00	2,091.08	1,933.05	1,852.52	7.63	10.64	-175.26	-477.55	84.31	672.85	658.23	14.62	46.017		
2,200.00	2,190.23	2,020.52	1,933.58	8.04	11.27	-174.30	-509.97	78.96	720.20	704.88	15.32	46.998		
2,300.00	2,289.38	2,107.98	2,014.64	8.44	11.91	-173.45	-542.40	73.61	767.70	751.67	16.03	47.895		
2,400.00	2,388.53	2,204.55	2,095.70	8.85	12.61	-172.71	-574.82	68.26	815.31	798.53	16.78	48.591		
2,500.00	2,487.68	2,282.92	2,176.75	9.25	13.18	-172.04	-607.24	62.91	863.01	845.57	17.45	49.470		
2,600.00	2,586.83	2,370.39	2,257.81	9.66	13.82	-171.45	-639.66	57.56	910.80	892.64	18.16	50.165		
2,700.00	2,685.99	2,457.85	2,338.87	10.07	14.45	-170.91	-672.09	52.21	958.65	939.78	18.87	50.808		
2,800.00	2,785.14	2,545.32	2,419.93	10.48	15.09	-170.43	-704.51	46.86	1,006.56	986.98	19.58	51.402		
2,900.00	2,884.29	2,632.79	2,500.99	10.89	15.73	-169.98	-736.93	41.51	1,054.53	1,034.23	20.30	51.954		
3,000.00	2,983.44	2,720.25	2,582.05	11.30	16.37	-169.58	-769.36	36.16	1,102.54	1,081.52	21.01	52.468		
3,100.00	3,082.59	2,807.72	2,663.11	11.71	17.01	-169.21	-801.78	30.80	1,150.59	1,128.86	21.73	52.947		
3,200.00	3,181.74	2,904.81	2,744.17	12.12	17.72	-168.87	-834.20	25.45	1,198.67	1,176.17	22.49	53.288		
3,300.00	3,280.89	2,982.66	2,825.23	12.53	18.29	-168.56	-866.62	20.10	1,246.78	1,223.61	23.17	53.813		
3,400.00	3,380.04	3,070.12	2,906.29	12.94	18.93	-168.27	-899.05	14.75	1,294.92	1,271.03	23.89	54.205		
3,500.00	3,479.20	3,157.59	2,987.35	13.35	19.57	-167.99	-931.47	9.40	1,343.08	1,318.47	24.61	54.574		
3,600.00	3,578.35	3,245.06	3,068.41	13.76	20.21	-167.74	-963.89	4.05	1,391.27	1,365.93	25.33	54.921		
3,700.00	3,677.50	3,332.52	3,149.47	14.17	20.85	-167.51	-996.32	-1.30	1,439.47	1,413.42	26.05	55.248		
3,800.00	3,776.65	3,419.99	3,230.53	14.58	21.49	-167.29	-1,028.74	-6.65	1,487.69	1,460.91	26.78	55.557		
3,900.00	3,875.80	3,507.46	3,311.58	14.99	22.13	-167.08	-1,061.16	-12.00	1,535.93	1,508.43	27.50	55.849		
4,000.00	3,974.95	3,605.08	3,392.64	15.41	22.85	-166.89	-1,093.59	-17.35	1,584.18	1,555.91	28.27	56.032		
4,100.00	4,074.10	3,682.39	3,473.70	15.82	23.42	-166.71	-1,126.01	-22.70	1,632.44	1,603.49	28.95	56.387		
4,200.00	4,173.25	3,769.86	3,554.76	16.23	24.06	-166.54	-1,158.43	-28.06	1,680.72	1,651.04	29.68	56.635		
4,300.00	4,272.40	3,857.33	3,635.82	16.64	24.70	-166.37	-1,190.85	-33.41	1,729.01	1,698.60	30.40	56.870		
4,400.00	4,371.56	3,944.79	3,716.88	17.06	25.34	-166.22	-1,223.28	-38.76	1,777.30	1,746.18	31.13	57.094		
4,500.00	4,470.71	4,032.26	3,797.94	17.47	25.98	-166.08	-1,255.70	-44.11	1,825.61	1,793.75	31.86	57.307		
4,600.00	4,569.86	4,119.73	3,879.00	17.88	26.62	-165.94	-1,288.12	-49.46	1,873.93	1,841.34	32.58	57.511		
4,700.00	4,669.01	4,207.19	3,960.06	18.29	27.26	-165.81	-1,320.55	-54.81	1,922.25	1,888.94	33.31	57.704		
4,800.00	4,768.16	4,294.66	4,041.12	18.71	27.91	-165.68	-1,352.97	-60.16	1,970.58	1,936.54	34.04	57.889		
4,900.00	4,867.31	4,382.13	4,122.18	19.12	28.55	-165.56	-1,385.39	-65.51	2,018.92	1,984.15	34.77	58.065		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,469.60	4,203.24	19.53	29.19	-165.45	-1,417.82	-70.86	2,067.26	2,031.76	35.50	58.234		
5,100.00	5,065.61	4,557.06	4,284.30	19.95	29.83	-165.34	-1,450.24	-76.21	2,115.61	2,079.38	36.23	58.395		
5,200.00	5,164.77	4,644.53	4,365.36	20.36	30.47	-165.24	-1,482.66	-81.56	2,163.96	2,127.00	36.96	58.550		
5,300.00	5,263.92	4,732.00	4,446.41	20.77	31.12	-165.14	-1,515.08	-86.91	2,212.32	2,174.63	37.69	58.698		
5,400.00	5,363.07	4,819.46	4,527.47	21.18	31.76	-165.05	-1,547.51	-92.27	2,260.69	2,222.27	38.42	58.840		
5,500.00	5,462.22	4,906.93	4,608.53	21.60	32.40	-164.96	-1,579.93	-97.62	2,309.06	2,269.90	39.15	58.976		
5,600.00	5,561.37	5,005.60	4,689.59	22.01	33.12	-164.87	-1,612.35	-102.97	2,357.43	2,317.49	39.94	59.030		
5,700.00	5,660.52	5,081.87	4,770.65	22.43	33.68	-164.79	-1,644.78	-108.32	2,405.81	2,365.19	40.62	59.232		
5,800.00	5,759.67	5,169.33	4,851.71	22.84	34.33	-164.71	-1,677.20	-113.67	2,454.19	2,412.84	41.35	59.352		
5,900.00	5,858.82	5,256.80	4,932.77	23.25	34.97	-164.63	-1,709.62	-119.02	2,502.57	2,460.49	42.08	59.468		
6,000.00	5,957.97	5,344.27	5,013.83	23.67	35.61	-164.56	-1,742.04	-124.37	2,550.96	2,508.14	42.82	59.579		
6,100.00	6,057.13	5,431.73	5,094.89	24.08	36.25	-164.49	-1,774.47	-129.72	2,599.35	2,555.80	43.55	59.686		
6,200.00	6,156.28	5,519.20	5,175.95	24.49	36.90	-164.42	-1,806.89	-135.07	2,647.75	2,603.46	44.28	59.789		
6,300.00	6,255.43	5,606.67	5,257.01	24.91	37.54	-164.35	-1,839.31	-140.42	2,696.14	2,651.12	45.02	59.888		
6,400.00	6,354.58	5,705.87	5,338.07	25.32	38.27	-164.29	-1,871.74	-145.77	2,744.54	2,698.73	45.81	59.914		
6,500.00	6,453.73	5,781.60	5,419.13	25.73	38.82	-164.23	-1,904.16	-151.13	2,792.94	2,746.45	46.49	60.076		
6,600.00	6,552.88	5,869.07	5,500.19	26.15	39.47	-164.17	-1,936.58	-156.48	2,841.35	2,794.12	47.23	60.165		
6,700.00	6,652.03	5,956.54	5,581.25	26.56	40.11	-164.11	-1,969.01	-161.83	2,889.75	2,841.79	47.96	60.250		
6,800.00	6,751.18	6,044.00	5,662.30	26.98	40.75	-164.05	-2,001.43	-167.18	2,938.16	2,889.46	48.70	60.333		
6,900.00	6,850.34	6,131.47	5,743.36	27.39	41.39	-164.00	-2,033.85	-172.53	2,986.57	2,937.14	49.44	60.412		
7,000.00	6,949.49	6,218.94	5,824.42	27.80	42.04	-163.95	-2,066.27	-177.88	3,034.99	2,984.81	50.17	60.489		
7,011.14	6,960.53	6,228.68	5,833.45	27.85	42.11	-163.94	-2,069.89	-178.48	3,040.38	2,990.12	50.26	60.498		
7,100.00	7,048.80	6,307.02	5,906.06	28.21	42.68	-164.15	-2,098.93	-183.27	3,082.24	3,031.32	50.91	60.541		
7,200.00	7,148.46	6,396.60	5,989.07	28.58	43.34	-164.34	-2,132.13	-188.75	3,126.52	3,074.87	51.65	60.531		
7,300.00	7,248.35	6,490.06	6,072.45	28.94	43.92	-163.95	-2,163.84	-193.51	3,169.71	3,117.14	52.39	60.579		
7,384.67	7,333.00	6,572.38	6,154.25	29.21	44.50	-163.95	-2,195.77	-198.88	3,212.94	3,160.84	53.11	60.627		
7,400.00	7,348.33	6,657.73	6,239.07	29.26	44.53	-163.95	-2,198.75	-199.44	3,215.97	3,163.76	53.16	60.637		
7,414.67	7,363.00	6,700.26	6,286.01	29.31	44.56	-163.95	-2,201.73	-200.00	3,218.99	3,166.70	53.21	60.647		
7,450.00	7,398.31	6,832.37	6,386.31	29.42	44.64	-163.95	-2,233.69	-206.30	3,251.09	3,198.57	53.52	60.844		
7,500.00	7,448.02	6,876.97	6,427.32	29.58	44.75	-163.95	-2,265.61	-212.61	3,283.18	3,230.66	53.83	61.041		
7,550.00	7,497.08	6,920.67	6,466.07	29.75	44.86	-163.95	-2,297.52	-218.92	3,315.27	3,262.75	54.14	61.238		
7,600.00	7,545.12	6,963.58	6,502.50	29.93	44.97	-163.95	-2,329.43	-225.23	3,347.36	3,294.84	54.45	61.435		
7,650.00	7,591.77	7,005.76	6,536.56	30.11	45.08	-163.95	-2,361.34	-231.54	3,379.45	3,326.93	54.76	61.632		
7,700.00	7,636.69	7,047.30	6,568.23	30.30	45.20	-163.95	-2,393.25	-237.85	3,411.54	3,359.02	55.07	61.829		
7,750.00	7,679.52	7,088.26	6,597.48	30.49	45.31	-163.95	-2,425.16	-244.16	3,443.63	3,391.11	55.38	62.026		
7,800.00	7,719.94	7,128.70	6,624.28	30.70	45.43	-163.95	-2,457.07	-250.47	3,475.72	3,423.20	55.69	62.223		
7,850.00	7,757.65	7,168.70	6,648.61	30.91	45.56	-163.95	-2,488.98	-256.78	3,507.81	3,455.29	56.00	62.420		
7,900.00	7,792.35	7,208.29	6,670.46	31.14	45.68	-163.95	-2,520.89	-263.09	3,539.90	3,487.38	56.31	62.617		
7,950.00	7,823.79	7,247.54	6,689.81	31.39	45.82	-163.95	-2,552.80	-269.40	3,572.00	3,519.47	56.62	62.814		
8,000.00	7,851.72	7,286.49	6,706.67	31.67	45.95	-163.95	-2,584.71	-275.71	3,604.09	3,551.56	56.93	63.011		
8,050.00	7,875.93	7,325.18	6,721.01	31.99	46.09	-163.95	-2,616.62	-282.02	3,636.18	3,583.65	57.24	63.208		
8,100.00	7,896.23	7,363.66	6,732.84	32.35	46.24	-163.95	-2,648.53	-288.33	3,668.27	3,615.74	57.55	63.405		
8,150.00	7,912.48	7,400.00	6,741.74	32.75	46.39	-163.95	-2,680.44	-294.64	3,700.36	3,647.83	57.86	63.602		
8,200.00	7,924.55	7,440.13	6,748.94	33.20	46.57	-163.95	-2,712.35	-300.95	3,732.45	3,679.92	58.17	63.799		
8,250.00	7,932.35	7,478.21	6,753.21	33.70	46.74	-163.95	-2,744.26	-307.26	3,764.54	3,712.01	58.48	63.996		
8,300.00	7,935.81	7,516.23	6,754.95	34.24	46.93	-163.95	-2,776.17	-313.57	3,796.63	3,744.10	58.79	64.193		
8,314.73	7,936.00	7,528.66	6,755.00	34.41	46.99	-163.95	-2,779.14	-314.57	3,799.60	3,747.07	58.84	64.213		
8,400.00	7,936.00	7,613.92	6,755.00	35.44	47.46	-163.95	-2,870.97	-324.02	3,886.43	3,833.90	52.73	43.731		
8,500.00	7,936.00	7,713.92	6,755.00	36.82	49.09	-163.95	-2,970.54	-333.47	3,986.00	3,933.47	52.53	43.642		
8,600.00	7,936.00	7,813.92	6,755.00	38.34	50.82	-163.95	-3,070.11	-342.92	4,085.57	4,033.04	52.33	43.553		
8,700.00	7,936.00	7,913.92	6,755.00	39.99	52.66	-163.95	-3,169.68	-352.37	4,185.14	4,132.61	52.13	43.464		
8,800.00	7,936.00	8,013.92	6,755.00	41.75	54.61	-163.95	-3,269.25	-361.82	4,284.71	4,232.18	51.93	43.375		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,936.00	9,113.92	7,755.00	43.62	56.68	-86.71	-2,368.80	-1,392.03	3,156.14	3,067.14	89.00	35.461		
9,000.00	7,936.00	9,213.92	7,755.00	45.56	57.87	-86.71	-2,368.37	-1,492.03	3,156.15	3,063.21	92.94	33.959		
9,100.00	7,936.00	9,313.92	7,755.00	47.59	59.18	-86.71	-2,367.94	-1,592.03	3,156.15	3,059.14	97.01	32.533		
9,200.00	7,936.00	9,413.92	7,755.00	49.67	60.61	-86.71	-2,367.50	-1,692.03	3,156.15	3,054.94	101.21	31.185		
9,300.00	7,936.00	9,513.92	7,755.00	51.82	62.15	-86.71	-2,367.07	-1,792.03	3,156.16	3,050.65	105.51	29.913		
9,400.00	7,935.99	9,613.92	7,755.00	54.01	63.79	-86.71	-2,366.63	-1,892.03	3,156.16	3,046.25	109.91	28.717		
9,500.00	7,935.99	9,713.92	7,755.00	56.25	65.53	-86.71	-2,366.20	-1,992.03	3,156.16	3,041.78	114.39	27.592		
9,600.00	7,935.99	9,813.92	7,755.00	58.53	67.35	-86.71	-2,365.77	-2,092.02	3,156.16	3,037.23	118.94	26.536		
9,700.00	7,935.99	9,913.92	7,755.00	60.84	69.25	-86.71	-2,365.33	-2,192.02	3,156.17	3,032.61	123.56	25.544		
9,800.00	7,935.99	10,013.92	7,755.00	63.18	71.22	-86.71	-2,364.90	-2,292.02	3,156.17	3,027.93	128.24	24.612		
9,900.00	7,935.99	10,113.92	7,755.00	65.55	73.25	-86.71	-2,364.46	-2,392.02	3,156.17	3,023.21	132.97	23.736		
10,000.00	7,935.99	10,213.92	7,755.00	67.94	75.33	-86.71	-2,364.03	-2,492.02	3,156.18	3,018.43	137.75	22.913		
10,100.00	7,935.99	10,313.92	7,755.00	70.35	77.47	-86.71	-2,363.60	-2,592.02	3,156.18	3,013.61	142.57	22.138		
10,200.00	7,935.99	10,413.92	7,755.00	72.79	79.65	-86.71	-2,363.16	-2,692.02	3,156.18	3,008.76	147.43	21.408		
10,300.00	7,935.99	10,513.92	7,755.00	75.24	81.86	-86.71	-2,362.73	-2,792.02	3,156.19	3,003.87	152.32	20.721		
10,400.00	7,935.99	10,613.92	7,755.00	77.70	84.12	-86.71	-2,362.29	-2,892.02	3,156.19	2,998.95	157.24	20.072		
10,500.00	7,935.99	10,713.92	7,755.00	80.19	86.40	-86.71	-2,361.86	-2,992.02	3,156.19	2,994.00	162.20	19.459		
10,600.00	7,935.99	10,813.92	7,755.00	82.68	88.71	-86.71	-2,361.43	-3,092.01	3,156.20	2,989.02	167.18	18.879		
10,700.00	7,935.99	10,913.92	7,755.00	85.19	91.05	-86.71	-2,360.99	-3,192.01	3,156.20	2,984.02	172.18	18.331		
10,800.00	7,935.99	11,013.92	7,755.00	87.70	93.41	-86.71	-2,360.56	-3,292.01	3,156.20	2,979.00	177.21	17.811		
10,900.00	7,935.99	11,113.92	7,755.00	90.23	95.80	-86.71	-2,360.12	-3,392.01	3,156.21	2,973.96	182.25	17.318		
11,000.00	7,935.99	11,213.92	7,754.99	92.77	98.20	-86.71	-2,359.69	-3,492.01	3,156.21	2,968.90	187.31	16.850		
11,100.00	7,935.99	11,313.92	7,754.99	95.31	100.62	-86.71	-2,359.26	-3,592.01	3,156.21	2,963.82	192.39	16.405		
11,200.00	7,935.99	11,413.92	7,754.99	97.87	103.05	-86.71	-2,358.82	-3,692.01	3,156.22	2,958.73	197.49	15.982		
11,300.00	7,935.99	11,513.92	7,754.99	100.43	105.50	-86.71	-2,358.39	-3,792.01	3,156.22	2,953.62	202.60	15.579		
11,400.00	7,935.99	11,613.92	7,754.99	102.99	107.97	-86.71	-2,357.95	-3,892.01	3,156.22	2,948.50	207.72	15.195		
11,500.00	7,935.98	11,713.92	7,754.99	105.57	110.44	-86.71	-2,357.52	-3,992.01	3,156.23	2,943.37	212.86	14.828		
11,600.00	7,935.98	11,813.92	7,754.99	108.15	112.93	-86.71	-2,357.09	-4,092.01	3,156.23	2,938.23	218.00	14.478		
11,700.00	7,935.98	11,913.92	7,754.99	110.73	115.43	-86.71	-2,356.65	-4,192.00	3,156.23	2,933.07	223.16	14.143		
11,800.00	7,935.98	12,013.92	7,754.99	113.32	117.94	-86.71	-2,356.22	-4,292.00	3,156.24	2,927.91	228.33	13.823		
11,900.00	7,935.98	12,113.92	7,754.99	115.91	120.45	-86.71	-2,355.78	-4,392.00	3,156.24	2,922.73	233.51	13.517		
12,000.00	7,935.98	12,213.92	7,754.99	118.51	122.98	-86.71	-2,355.35	-4,492.00	3,156.24	2,917.55	238.69	13.223		
12,100.00	7,935.98	12,313.92	7,754.99	121.11	125.51	-86.71	-2,354.92	-4,592.00	3,156.25	2,912.36	243.89	12.942		
12,200.00	7,935.98	12,413.92	7,754.99	123.72	128.05	-86.71	-2,354.48	-4,692.00	3,156.25	2,907.16	249.09	12.671		
12,300.00	7,935.98	12,513.92	7,754.99	126.33	130.60	-86.71	-2,354.05	-4,792.00	3,156.25	2,901.96	254.30	12.412		
12,400.00	7,935.98	12,613.92	7,754.99	128.94	133.15	-86.71	-2,353.61	-4,892.00	3,156.26	2,896.75	259.51	12.162		
12,500.00	7,935.98	12,713.92	7,754.99	131.56	135.71	-86.71	-2,353.18	-4,992.00	3,156.26	2,891.53	264.73	11.922		
12,600.00	7,935.98	12,813.92	7,754.99	134.17	138.27	-86.71	-2,352.75	-5,092.00	3,156.26	2,886.30	269.96	11.692		
12,700.00	7,935.98	12,913.92	7,754.99	136.80	140.84	-86.71	-2,352.31	-5,191.99	3,156.27	2,881.07	275.19	11.469		
12,800.00	7,935.98	13,013.92	7,754.99	139.42	143.42	-86.71	-2,351.88	-5,291.99	3,156.27	2,875.84	280.43	11.255		
12,900.00	7,935.98	13,113.92	7,754.99	142.05	146.00	-86.71	-2,351.44	-5,391.99	3,156.27	2,870.60	285.68	11.048		
13,000.00	7,935.98	13,213.92	7,754.99	144.68	148.58	-86.71	-2,351.01	-5,491.99	3,156.28	2,865.35	290.92	10.849		
13,100.00	7,935.98	13,313.92	7,754.99	147.31	151.17	-86.71	-2,350.58	-5,591.99	3,156.28	2,860.10	296.18	10.657		
13,200.00	7,935.98	13,413.92	7,754.99	149.94	153.76	-86.71	-2,350.14	-5,691.99	3,156.28	2,854.85	301.43	10.471		
13,300.00	7,935.98	13,513.92	7,754.99	152.57	156.36	-86.71	-2,349.71	-5,791.99	3,156.29	2,849.59	306.70	10.291		
13,400.00	7,935.98	13,613.92	7,754.99	155.21	158.96	-86.71	-2,349.27	-5,891.99	3,156.29	2,844.33	311.96	10.118		
13,500.00	7,935.97	13,713.92	7,754.99	157.85	161.56	-86.71	-2,348.84	-5,991.99	3,156.29	2,839.06	317.23	9.950		
13,600.00	7,935.97	13,813.92	7,754.99	160.49	164.16	-86.71	-2,348.41	-6,091.99	3,156.30	2,833.79	322.50	9.787		
13,700.00	7,935.97	13,913.92	7,754.99	163.13	166.77	-86.71	-2,347.97	-6,191.99	3,156.30	2,828.52	327.78	9.629		
13,800.00	7,935.97	14,013.92	7,754.99	165.78	169.38	-86.71	-2,347.54	-6,291.98	3,156.30	2,823.25	333.06	9.477		
13,900.00	7,935.97	14,113.92	7,754.99	168.42	172.00	-86.71	-2,347.11	-6,391.98	3,156.31	2,817.97	338.34	9.329		
14,000.00	7,935.97	14,213.92	7,754.99	171.07	174.61	-86.71	-2,346.67	-6,491.98	3,156.31	2,812.69	343.62	9.185		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	7,935.97	14,313.92	7,754.99	173.72	177.23	-86.71	-2,346.24	-6,591.98	3,156.31	2,807.40	348.91	9.046		
14,200.00	7,935.97	14,413.92	7,754.99	176.36	179.86	-86.71	-2,345.80	-6,691.98	3,156.32	2,802.12	354.20	8.911		
14,300.00	7,935.97	14,513.92	7,754.99	179.02	182.48	-86.71	-2,345.37	-6,791.98	3,156.32	2,796.83	359.49	8.780		
14,400.00	7,935.97	14,613.92	7,754.99	181.67	185.10	-86.71	-2,344.94	-6,891.98	3,156.32	2,791.53	364.79	8.652		
14,500.00	7,935.97	14,713.92	7,754.99	184.32	187.73	-86.71	-2,344.50	-6,991.98	3,156.33	2,786.24	370.08	8.529		
14,600.00	7,935.97	14,813.92	7,754.99	186.97	190.36	-86.71	-2,344.07	-7,091.98	3,156.33	2,780.94	375.38	8.408		
14,700.00	7,935.97	14,913.92	7,754.99	189.63	192.99	-86.71	-2,343.63	-7,191.98	3,156.33	2,775.65	380.69	8.291		
14,800.00	7,935.97	15,013.92	7,754.99	192.28	195.63	-86.71	-2,343.20	-7,291.98	3,156.34	2,770.35	385.99	8.177		
14,900.00	7,935.97	15,113.92	7,754.99	194.94	198.26	-86.71	-2,342.77	-7,391.97	3,156.34	2,765.04	391.29	8.066		
15,000.00	7,935.97	15,213.92	7,754.99	197.60	200.90	-86.71	-2,342.33	-7,491.97	3,156.34	2,759.74	396.60	7.958		
15,100.00	7,935.97	15,313.92	7,754.99	200.26	203.54	-86.71	-2,341.90	-7,591.97	3,156.35	2,754.43	401.91	7.853		
15,200.00	7,935.97	15,413.92	7,754.99	202.91	206.18	-86.71	-2,341.46	-7,691.97	3,156.35	2,749.13	407.22	7.751		
15,300.00	7,935.97	15,513.92	7,754.99	205.57	208.82	-86.71	-2,341.03	-7,791.97	3,156.35	2,743.82	412.53	7.651		
15,400.00	7,935.97	15,613.92	7,754.99	208.24	211.46	-86.71	-2,340.60	-7,891.97	3,156.35	2,738.51	417.85	7.554		
15,500.00	7,935.97	15,713.92	7,754.99	210.90	214.10	-86.71	-2,340.16	-7,991.97	3,156.36	2,733.20	423.16	7.459		
15,600.00	7,935.96	15,813.92	7,754.99	213.56	216.75	-86.71	-2,339.73	-8,091.97	3,156.36	2,727.88	428.48	7.366		
15,700.00	7,935.96	15,913.92	7,754.99	216.22	219.39	-86.71	-2,339.29	-8,191.97	3,156.36	2,722.57	433.80	7.276		
15,800.00	7,935.96	16,013.92	7,754.99	218.89	222.04	-86.71	-2,338.86	-8,291.97	3,156.37	2,717.25	439.12	7.188		
15,900.00	7,935.96	16,113.92	7,754.99	221.55	224.69	-86.71	-2,338.43	-8,391.96	3,156.37	2,711.93	444.44	7.102		
16,000.00	7,935.96	16,213.92	7,754.99	224.21	227.34	-86.71	-2,337.99	-8,491.96	3,156.37	2,706.61	449.76	7.018		
16,100.00	7,935.96	16,313.92	7,754.99	226.88	229.99	-86.71	-2,337.56	-8,591.96	3,156.38	2,701.29	455.08	6.936		
16,200.00	7,935.96	16,413.92	7,754.98	229.55	232.64	-86.71	-2,337.12	-8,691.96	3,156.38	2,695.97	460.41	6.856		
16,300.00	7,935.96	16,513.92	7,754.98	232.21	235.30	-86.71	-2,336.69	-8,791.96	3,156.38	2,690.65	465.74	6.777		
16,400.00	7,935.96	16,613.92	7,754.98	234.88	237.95	-86.71	-2,336.26	-8,891.96	3,156.39	2,685.33	471.06	6.701		
16,500.00	7,935.96	16,713.92	7,754.98	237.55	240.60	-86.71	-2,335.82	-8,991.96	3,156.39	2,680.00	476.39	6.626		
16,600.00	7,935.96	16,813.92	7,754.98	240.21	243.26	-86.71	-2,335.39	-9,091.96	3,156.39	2,674.67	481.72	6.552		
16,700.00	7,935.96	16,913.92	7,754.98	242.88	245.92	-86.71	-2,334.95	-9,191.96	3,156.40	2,669.35	487.05	6.481		
16,800.00	7,935.96	17,013.92	7,754.98	245.55	248.57	-86.71	-2,334.52	-9,291.96	3,156.40	2,664.02	492.38	6.410		
16,900.00	7,935.96	17,113.92	7,754.98	248.22	251.23	-86.71	-2,334.09	-9,391.96	3,156.40	2,658.69	497.71	6.342		
17,000.00	7,935.96	17,213.92	7,754.98	250.89	253.89	-86.71	-2,333.65	-9,491.95	3,156.41	2,653.36	503.04	6.275		
17,100.00	7,935.96	17,313.92	7,754.98	253.56	256.55	-86.71	-2,333.22	-9,591.95	3,156.41	2,648.03	508.38	6.209		
17,200.00	7,935.96	17,413.92	7,754.98	256.23	259.21	-86.71	-2,332.78	-9,691.95	3,156.41	2,642.70	513.71	6.144		
17,300.00	7,935.96	17,513.92	7,754.98	258.90	261.87	-86.71	-2,332.35	-9,791.95	3,156.42	2,637.37	519.05	6.081		
17,400.00	7,935.96	17,613.92	7,754.98	261.58	264.53	-86.71	-2,331.92	-9,891.95	3,156.42	2,632.04	524.38	6.019		
17,500.00	7,935.96	17,713.92	7,754.98	264.25	267.19	-86.71	-2,331.48	-9,991.95	3,156.42	2,626.70	529.72	5.959		
17,600.00	7,935.96	17,813.92	7,754.98	266.92	269.86	-86.71	-2,331.05	-10,091.95	3,156.43	2,621.37	535.06	5.899		
17,700.00	7,935.95	17,913.92	7,754.98	269.59	272.52	-86.71	-2,330.61	-10,191.95	3,156.43	2,616.03	540.40	5.841		
17,800.00	7,935.95	18,013.92	7,754.98	272.26	275.18	-86.71	-2,330.18	-10,291.95	3,156.43	2,610.70	545.74	5.784		
17,900.00	7,935.95	18,113.92	7,754.98	274.94	277.85	-86.71	-2,329.75	-10,391.95	3,156.44	2,605.36	551.08	5.728		
17,996.01	7,935.95	18,210.73	7,755.00	277.50	280.43	-86.71	-2,329.10	-10,488.75	3,156.22	2,600.00	556.22	5.674		
17,997.91	7,936.00	18,210.73	7,755.00	277.56	280.43	-86.71	-2,329.10	-10,488.75	3,156.14	2,599.86	556.28	5.674 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	36.56	36.56					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	36.56	36.56	36.29	0.27	135.993		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	36.56	36.56	35.58	0.99	37.089		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	36.56	36.56	34.86	1.70	21.473		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	36.56	36.56	34.14	2.42	15.110		
500.00	500.00	500.17	500.15	1.57	1.57	87.27	1.73	36.28	36.32	33.18	3.14	11.580		
583.88	583.88	584.00	583.88	1.87	1.87	80.70	5.83	35.61	36.08	32.34	3.74	9.651 CC		
600.00	600.00	600.09	599.92	1.93	1.93	78.99	6.89	35.43	36.10	32.24	3.85	9.366 ES		
700.00	700.00	699.52	698.98	2.29	2.29	65.60	15.44	34.03	37.39	32.81	4.58	8.169		
800.00	800.00	798.24	796.96	2.64	2.67	49.65	27.27	32.10	42.23	36.93	5.30	7.966		
900.00	899.98	896.29	893.81	3.00	3.05	52.17	42.32	29.63	50.95	44.94	6.01	8.472		
1,000.00	999.84	993.88	989.64	3.36	3.47	43.37	60.53	26.65	61.77	55.05	6.72	9.197		
1,100.00	1,099.45	1,091.02	1,084.34	3.72	3.90	37.55	81.85	23.16	73.73	66.32	7.41	9.946		
1,173.53	1,172.47	1,163.16	1,154.23	3.99	4.24	34.57	99.45	20.28	82.71	74.78	7.94	10.421		
1,200.00	1,198.72	1,189.43	1,179.67	4.09	4.37	33.78	105.93	19.22	85.77	77.63	8.13	10.545		
1,300.00	1,297.87	1,288.66	1,275.76	4.47	4.86	31.24	130.39	15.22	97.43	88.55	8.88	10.968		
1,400.00	1,397.02	1,387.90	1,371.85	4.85	5.36	29.24	154.84	11.21	109.25	99.61	9.64	11.338		
1,500.00	1,496.17	1,487.13	1,467.95	5.24	5.86	27.64	179.30	7.21	121.17	110.78	10.39	11.661		
1,600.00	1,595.32	1,586.37	1,564.04	5.63	6.38	26.32	203.75	3.20	133.16	122.01	11.15	11.946		
1,700.00	1,694.47	1,685.60	1,660.13	6.03	6.89	25.22	228.21	-0.80	145.22	133.31	11.91	12.198		
1,800.00	1,793.62	1,784.84	1,756.22	6.43	7.41	24.29	252.67	-4.80	157.31	144.65	12.66	12.421		
1,900.00	1,892.78	1,884.08	1,852.31	6.83	7.93	23.49	277.12	-8.81	169.45	156.02	13.43	12.621		
2,000.00	1,991.93	1,983.31	1,948.40	7.23	8.46	22.80	301.58	-12.81	181.61	167.42	14.19	12.801		
2,100.00	2,091.08	2,082.55	2,044.49	7.63	8.98	22.20	326.04	-16.81	193.79	178.84	14.95	12.963		
2,200.00	2,190.23	2,181.78	2,140.59	8.04	9.51	21.67	350.49	-20.82	205.99	190.28	15.71	13.110		
2,300.00	2,289.38	2,281.02	2,236.68	8.44	10.04	21.19	374.95	-24.82	218.21	201.74	16.48	13.244		
2,400.00	2,388.53	2,380.25	2,332.77	8.85	10.57	20.77	399.40	-28.83	230.44	213.20	17.24	13.366		
2,500.00	2,487.68	2,479.49	2,428.86	9.25	11.10	20.39	423.86	-32.83	242.69	224.68	18.01	13.479		
2,600.00	2,586.83	2,578.72	2,524.95	9.66	11.63	20.05	448.32	-36.83	254.94	236.17	18.77	13.582		
2,700.00	2,685.99	2,677.96	2,621.04	10.07	12.16	19.74	472.77	-40.84	267.20	247.66	19.54	13.677		
2,800.00	2,785.14	2,777.20	2,717.13	10.48	12.69	19.45	497.23	-44.84	279.47	259.16	20.30	13.765		
2,900.00	2,884.29	2,876.43	2,813.23	10.89	13.23	19.19	521.69	-48.85	291.74	270.67	21.07	13.847		
3,000.00	2,983.44	2,975.67	2,909.32	11.30	13.76	18.95	546.14	-52.85	304.02	282.18	21.83	13.924		
3,100.00	3,082.59	3,074.90	3,005.41	11.71	14.30	18.73	570.60	-56.85	316.30	293.70	22.60	13.995		
3,200.00	3,181.74	3,174.14	3,101.50	12.12	14.83	18.53	595.05	-60.86	328.59	305.22	23.37	14.061		
3,300.00	3,280.89	3,273.37	3,197.59	12.53	15.36	18.34	619.51	-64.86	340.88	316.75	24.14	14.124		
3,400.00	3,380.04	3,372.61	3,293.68	12.94	15.90	18.16	643.97	-68.87	353.18	328.27	24.90	14.182		
3,500.00	3,479.20	3,471.85	3,389.77	13.35	16.44	18.00	668.42	-72.87	365.48	339.80	25.67	14.237		
3,600.00	3,578.35	3,571.08	3,485.87	13.76	16.97	17.84	692.88	-76.87	377.78	351.34	26.44	14.289		
3,700.00	3,677.50	3,670.32	3,581.96	14.17	17.51	17.70	717.34	-80.88	390.08	362.87	27.21	14.338		
3,800.00	3,776.65	3,769.55	3,678.05	14.58	18.04	17.56	741.79	-84.88	402.39	374.41	27.97	14.384		
3,900.00	3,875.80	3,868.79	3,774.14	14.99	18.58	17.43	766.25	-88.88	414.69	385.95	28.74	14.428		
4,000.00	3,974.95	3,968.02	3,870.23	15.41	19.12	17.31	790.71	-92.89	427.00	397.49	29.51	14.470		
4,100.00	4,074.10	4,067.26	3,966.32	15.82	19.65	17.20	815.16	-96.89	439.32	409.04	30.28	14.509		
4,200.00	4,173.25	4,166.49	4,062.41	16.23	20.19	17.09	839.62	-100.90	451.63	420.58	31.05	14.546		
4,300.00	4,272.40	4,265.73	4,158.51	16.64	20.73	16.99	864.07	-104.90	463.94	432.13	31.82	14.582		
4,400.00	4,371.56	4,364.97	4,254.60	17.06	21.26	16.90	888.53	-108.90	476.26	443.68	32.58	14.616		
4,500.00	4,470.71	4,464.20	4,350.69	17.47	21.80	16.81	912.99	-112.91	488.58	455.22	33.35	14.648		
4,600.00	4,569.86	4,563.44	4,446.78	17.88	22.34	16.72	937.44	-116.91	500.90	466.77	34.12	14.679		
4,700.00	4,669.01	4,662.67	4,542.87	18.29	22.88	16.64	961.90	-120.92	513.22	478.32	34.89	14.709		
4,800.00	4,768.16	4,761.91	4,638.96	18.71	23.41	16.56	986.36	-124.92	525.54	489.88	35.66	14.737		
4,900.00	4,867.31	4,861.14	4,735.05	19.12	23.95	16.48	1,010.81	-128.92	537.86	501.43	36.43	14.764		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,960.38	4,831.14	19.53	24.49	16.41	1,035.27	-132.93	550.18	512.98	37.20	14.790		
5,100.00	5,065.61	5,059.61	4,927.24	19.95	25.03	16.34	1,059.72	-136.93	562.50	524.54	37.97	14.815		
5,200.00	5,164.77	5,158.85	5,023.33	20.36	25.56	16.28	1,084.18	-140.93	574.83	536.09	38.74	14.839		
5,300.00	5,263.92	5,258.09	5,119.42	20.77	26.10	16.21	1,108.64	-144.94	587.15	547.65	39.51	14.862		
5,400.00	5,363.07	5,357.32	5,215.51	21.18	26.64	16.15	1,133.09	-148.94	599.48	559.20	40.28	14.884		
5,500.00	5,462.22	5,456.56	5,311.60	21.60	27.18	16.09	1,157.55	-152.95	611.80	570.76	41.05	14.905		
5,600.00	5,561.37	5,555.79	5,407.69	22.01	27.72	16.04	1,182.01	-156.95	624.13	582.31	41.82	14.926		
5,700.00	5,660.52	5,655.03	5,503.78	22.43	28.25	15.98	1,206.46	-160.95	636.46	593.87	42.58	14.946		
5,800.00	5,759.67	5,754.26	5,599.88	22.84	28.79	15.93	1,230.92	-164.96	648.78	605.43	43.35	14.965		
5,900.00	5,858.82	5,853.50	5,695.97	23.25	29.33	15.88	1,255.38	-168.96	661.11	616.99	44.12	14.983		
6,000.00	5,957.97	5,952.73	5,792.06	23.67	29.87	15.84	1,279.83	-172.97	673.44	628.55	44.89	15.001		
6,100.00	6,057.13	6,051.97	5,888.15	24.08	30.41	15.79	1,304.29	-176.97	685.77	640.11	45.66	15.018		
6,200.00	6,156.28	6,151.21	5,984.24	24.49	30.94	15.75	1,328.74	-180.97	698.10	651.67	46.43	15.034		
6,300.00	6,255.43	6,250.44	6,080.33	24.91	31.48	15.70	1,353.20	-184.98	710.43	663.23	47.20	15.050		
6,400.00	6,354.58	6,349.68	6,176.42	25.32	32.02	15.66	1,377.66	-188.98	722.76	674.79	47.97	15.066		
6,500.00	6,453.73	6,448.91	6,272.52	25.73	32.56	15.62	1,402.11	-192.99	735.09	686.35	48.74	15.081		
6,600.00	6,552.88	6,548.15	6,368.61	26.15	33.10	15.58	1,426.57	-196.99	747.42	697.91	49.51	15.095		
6,700.00	6,652.03	6,647.38	6,464.70	26.56	33.64	15.55	1,451.03	-200.99	759.75	709.47	50.28	15.109		
6,800.00	6,751.18	6,746.62	6,560.79	26.98	34.18	15.51	1,475.48	-205.00	772.08	721.03	51.05	15.123		
6,900.00	6,850.34	6,845.81	6,656.91	27.39	34.66	15.49	1,500.57	-209.92	782.54	730.49	52.05	15.133		
7,000.00	6,949.49	6,945.02	6,753.04	27.80	35.50	15.55	1,525.53	-214.01	788.34	735.35	52.99	14.878		
7,011.14	6,960.53	7,031.00	6,839.03	27.85	35.56	15.56	1,532.93	-214.40	788.69	735.61	53.08	14.858		
7,100.00	7,048.80	7,153.06	6,959.96	28.21	36.05	15.66	1,549.18	-217.06	790.73	736.94	53.80	14.698		
7,200.00	7,148.46	7,290.53	7,096.87	28.58	36.54	15.74	1,561.38	-219.06	791.74	737.26	54.48	14.532		
7,300.00	7,248.35	7,428.03	7,234.23	28.94	36.94	15.80	1,567.09	-219.99	791.37	736.33	55.04	14.379		
7,384.27	7,332.61	7,526.31	7,332.50	29.21	37.19	15.80	1,567.55	-220.31	790.50	734.98	55.52	14.238		
7,384.67	7,333.00	7,526.70	7,332.89	29.21	37.19	-0.02	1,567.55	-220.32	790.50	734.98	55.52	14.237		
7,400.00	7,348.33	7,541.91	7,348.09	29.26	37.23	-0.06	1,567.55	-220.97	790.50	734.88	55.62	14.212		
7,414.67	7,363.00	7,556.42	7,362.57	29.31	37.26	-0.14	1,567.56	-221.97	790.51	734.79	55.72	14.188		
7,450.00	7,398.31	7,591.23	7,397.16	29.42	37.35	89.41	1,567.57	-225.85	790.53	734.59	55.94	14.131		
7,500.00	7,448.02	7,640.21	7,445.28	29.58	37.49	89.12	1,567.61	-234.85	790.58	734.30	56.28	14.046		
7,550.00	7,497.08	7,688.87	7,492.16	29.75	37.62	88.84	1,567.67	-247.82	790.65	734.00	56.65	13.957		
7,600.00	7,545.12	7,737.22	7,537.49	29.93	37.76	88.57	1,567.74	-264.61	790.74	733.70	57.04	13.863		
7,650.00	7,591.77	7,785.28	7,580.99	30.11	37.91	88.31	1,567.83	-285.02	790.83	733.38	57.45	13.764		
7,700.00	7,636.69	7,833.08	7,622.40	30.30	38.06	88.06	1,567.93	-308.87	790.94	733.04	57.90	13.661		
7,750.00	7,679.52	7,880.62	7,661.47	30.49	38.21	87.83	1,568.05	-335.93	791.05	732.68	58.38	13.551		
7,800.00	7,719.94	7,927.94	7,698.00	30.70	38.37	87.62	1,568.18	-365.98	791.17	732.28	58.89	13.434		
7,850.00	7,757.65	7,975.04	7,731.78	30.91	38.54	87.42	1,568.32	-398.79	791.29	731.83	59.46	13.309		
7,900.00	7,792.35	8,021.96	7,762.64	31.14	38.71	87.24	1,568.47	-434.12	791.40	731.32	60.08	13.173		
7,950.00	7,823.79	8,068.71	7,790.40	31.39	38.90	87.08	1,568.63	-471.71	791.51	730.75	60.76	13.027		
8,000.00	7,851.72	8,115.31	7,814.94	31.67	39.10	86.94	1,568.80	-511.31	791.60	730.09	61.51	12.869		
8,050.00	7,875.93	8,161.79	7,836.13	31.99	39.31	86.83	1,568.98	-552.67	791.69	729.34	62.35	12.698		
8,100.00	7,896.23	8,208.17	7,853.87	32.35	39.55	86.73	1,569.17	-595.51	791.76	728.49	63.26	12.516		
8,150.00	7,912.48	8,254.48	7,868.06	32.75	39.81	86.66	1,569.36	-639.57	791.81	727.55	64.26	12.322		
8,200.00	7,924.55	8,300.72	7,878.64	33.20	40.09	86.61	1,569.55	-684.58	791.84	726.51	65.34	12.119		
8,250.00	7,932.35	8,346.93	7,885.55	33.70	40.40	86.59	1,569.75	-730.26	791.86	725.37	66.49	11.909		
8,300.00	7,935.81	8,393.14	7,888.76	34.24	40.74	86.59	1,569.95	-776.33	791.86	724.15	67.71	11.695		
8,314.73	7,936.00	8,413.26	7,889.00	34.41	40.90	86.60	1,570.00	-789.69	791.85	723.69	68.16	11.617		
8,400.00	7,936.00	8,508.24	7,889.00	35.44	41.72	86.60	1,570.37	-874.95	791.85	721.29	70.55	11.224		
8,500.00	7,936.00	8,608.24	7,889.00	36.82	42.74	86.60	1,570.80	-974.95	791.84	718.36	73.48	10.776		
8,600.00	7,936.00	8,708.24	7,889.00	38.34	43.92	86.60	1,571.23	-1,074.95	791.83	715.16	76.68	10.327		
8,700.00	7,936.00	8,808.24	7,889.00	39.99	45.24	86.60	1,571.66	-1,174.95	791.83	711.72	80.11	9.885		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Sec 4-T4S-R65W - JAMASO 4-6S 5-6-2 - ORIGINAL WELLBORE - PROPOSAL 1		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
8,800.00	7,936.00	8,908.24	7,888.99	41.75	46.71	86.60	1,572.10	-1,274.95	791.82	708.08	83.74	9.456				
8,900.00	7,936.00	9,008.25	7,888.99	43.62	48.30	86.60	1,572.53	-1,374.95	791.82	704.26	87.55	9.044				
9,000.00	7,936.00	9,108.25	7,888.99	45.56	50.01	86.60	1,572.96	-1,474.94	791.81	700.29	91.52	8.652				
9,100.00	7,936.00	9,208.25	7,888.99	47.59	51.81	86.60	1,573.39	-1,574.94	791.80	696.18	95.63	8.280				
9,200.00	7,936.00	9,308.25	7,888.99	49.67	53.71	86.60	1,573.82	-1,674.94	791.80	691.95	99.85	7.930				
9,300.00	7,936.00	9,408.25	7,888.99	51.82	55.68	86.60	1,574.25	-1,774.94	791.79	687.61	104.18	7.600				
9,400.00	7,935.99	9,508.25	7,888.99	54.01	57.71	86.60	1,574.69	-1,874.94	791.79	683.18	108.61	7.290				
9,500.00	7,935.99	9,608.25	7,888.99	56.25	59.81	86.60	1,575.12	-1,974.93	791.78	678.67	113.11	7.000				
9,600.00	7,935.99	9,708.25	7,888.99	58.53	61.95	86.60	1,575.55	-2,074.93	791.78	674.08	117.69	6.727				
9,700.00	7,935.99	9,808.25	7,888.98	60.84	64.15	86.60	1,575.98	-2,174.93	791.77	669.44	122.34	6.472				
9,800.00	7,935.99	9,908.25	7,888.98	63.18	66.38	86.60	1,576.41	-2,274.93	791.77	664.73	127.04	6.232				
9,900.00	7,935.99	10,008.25	7,888.98	65.55	68.65	86.60	1,576.85	-2,374.93	791.76	659.97	131.79	6.008				
10,000.00	7,935.99	10,108.26	7,888.98	67.94	70.95	86.60	1,577.28	-2,474.93	791.76	655.17	136.59	5.797				
10,100.00	7,935.99	10,208.26	7,888.98	70.35	73.28	86.60	1,577.71	-2,574.92	791.75	650.33	141.43	5.598				
10,200.00	7,935.99	10,308.26	7,888.98	72.79	75.63	86.60	1,578.15	-2,674.92	791.75	645.44	146.31	5.412				
10,300.00	7,935.99	10,408.26	7,888.98	75.24	78.01	86.60	1,578.58	-2,774.92	791.75	640.53	151.22	5.236				
10,400.00	7,935.99	10,508.26	7,888.98	77.70	80.41	86.60	1,579.01	-2,874.92	791.74	635.59	156.16	5.070				
10,500.00	7,935.99	10,608.26	7,888.98	80.19	82.83	86.60	1,579.44	-2,974.92	791.74	630.61	161.12	4.914				
10,600.00	7,935.99	10,708.26	7,888.98	82.68	85.27	86.60	1,579.88	-3,074.91	791.73	625.62	166.12	4.766				
10,700.00	7,935.99	10,808.26	7,888.98	85.19	87.72	86.60	1,580.31	-3,174.91	791.73	620.60	171.13	4.626				
10,800.00	7,935.99	10,908.26	7,888.98	87.70	90.18	86.60	1,580.75	-3,274.91	791.73	615.56	176.17	4.494				
10,900.00	7,935.99	11,008.26	7,888.98	90.23	92.66	86.60	1,581.18	-3,374.91	791.72	610.50	181.23	4.369				
11,000.00	7,935.99	11,108.26	7,888.97	92.77	95.15	86.60	1,581.61	-3,474.91	791.72	605.42	186.30	4.250				
11,100.00	7,935.99	11,208.27	7,888.97	95.31	97.65	86.60	1,582.05	-3,574.90	791.72	600.33	191.39	4.137				
11,200.00	7,935.99	11,308.27	7,888.97	97.87	100.17	86.60	1,582.48	-3,674.90	791.71	595.22	196.50	4.029				
11,300.00	7,935.99	11,408.27	7,888.97	100.43	102.69	86.60	1,582.92	-3,774.90	791.71	590.10	201.62	3.927				
11,400.00	7,935.99	11,508.27	7,888.97	102.99	105.22	86.60	1,583.35	-3,874.90	791.71	584.96	206.75	3.829				
11,500.00	7,935.98	11,608.27	7,888.97	105.57	107.75	86.60	1,583.78	-3,974.90	791.71	579.81	211.89	3.736				
11,600.00	7,935.98	11,708.27	7,888.97	108.15	110.30	86.60	1,584.22	-4,074.90	791.70	574.66	217.05	3.648				
11,700.00	7,935.98	11,808.27	7,888.97	110.73	112.85	86.60	1,584.65	-4,174.89	791.70	569.49	222.21	3.563				
11,800.00	7,935.98	11,908.27	7,888.97	113.32	115.41	86.60	1,585.09	-4,274.89	791.70	564.31	227.38	3.482				
11,900.00	7,935.98	12,008.27	7,888.97	115.91	117.98	86.60	1,585.52	-4,374.89	791.70	559.13	232.57	3.404				
12,000.00	7,935.98	12,108.27	7,888.97	118.51	120.55	86.60	1,585.96	-4,474.89	791.69	553.93	237.76	3.330				
12,100.00	7,935.98	12,208.28	7,888.97	121.11	123.12	86.60	1,586.39	-4,574.89	791.69	548.73	242.96	3.259				
12,200.00	7,935.98	12,308.28	7,888.97	123.72	125.70	86.60	1,586.83	-4,674.88	791.69	543.52	248.17	3.190				
12,300.00	7,935.98	12,408.28	7,888.97	126.33	128.29	86.60	1,587.26	-4,774.88	791.69	538.31	253.38	3.125				
12,400.00	7,935.98	12,508.28	7,888.97	128.94	130.88	86.60	1,587.70	-4,874.88	791.69	533.08	258.60	3.061				
12,500.00	7,935.98	12,608.28	7,888.97	131.56	133.47	86.60	1,588.14	-4,974.88	791.68	527.86	263.83	3.001				
12,600.00	7,935.98	12,708.28	7,888.97	134.17	136.07	86.60	1,588.57	-5,074.88	791.68	522.62	269.06	2.942				
12,700.00	7,935.98	12,808.28	7,888.97	136.80	138.67	86.60	1,589.01	-5,174.87	791.68	517.38	274.30	2.886				
12,800.00	7,935.98	12,908.28	7,888.97	139.42	141.27	86.60	1,589.44	-5,274.87	791.68	512.14	279.54	2.832				
12,900.00	7,935.98	13,008.28	7,888.97	142.05	143.88	86.60	1,589.88	-5,374.87	791.68	506.89	284.79	2.780				
13,000.00	7,935.98	13,108.28	7,888.97	144.68	146.49	86.60	1,590.32	-5,474.87	791.68	501.64	290.04	2.730				
13,100.00	7,935.98	13,208.28	7,888.97	147.31	149.11	86.60	1,590.75	-5,574.87	791.68	496.38	295.29	2.681				
13,200.00	7,935.98	13,308.29	7,888.97	149.94	151.72	86.60	1,591.19	-5,674.87	791.68	491.12	300.55	2.634				
13,300.00	7,935.98	13,408.29	7,888.97	152.57	154.34	86.60	1,591.63	-5,774.86	791.68	485.86	305.82	2.589				
13,400.00	7,935.98	13,508.29	7,888.97	155.21	156.96	86.60	1,592.06	-5,874.86	791.67	480.59	311.09	2.545				
13,500.00	7,935.97	13,608.29	7,888.97	157.85	159.59	86.60	1,592.50	-5,974.86	791.67	475.32	316.36	2.502				
13,600.00	7,935.97	13,708.29	7,888.97	160.49	162.21	86.60	1,592.94	-6,074.86	791.67	470.04	321.63	2.461				
13,700.00	7,935.97	13,808.29	7,888.97	163.13	164.84	86.60	1,593.37	-6,174.86	791.67	464.76	326.91	2.422				
13,798.30	7,935.97	13,910.00	7,888.97	165.73	167.51	86.60	1,593.80	-6,273.15	791.67	459.48	332.19	2.383				
13,800.00	7,935.97	13,908.29	7,888.97	165.78	167.47	86.60	1,593.81	-6,274.85	791.67	459.48	332.19	2.383				

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	7,935.97	14,008.29	7,888.97	168.42	170.10	86.60	1,594.25	-6,374.85	791.67	454.20	337.47	2.346		
14,000.00	7,935.97	14,108.29	7,888.97	171.07	172.73	86.60	1,594.69	-6,474.85	791.67	448.91	342.76	2.310		
14,100.00	7,935.97	14,208.29	7,888.97	173.72	175.37	86.60	1,595.12	-6,574.85	791.67	443.62	348.05	2.275		
14,200.00	7,935.97	14,308.29	7,888.97	176.36	178.01	86.60	1,595.56	-6,674.85	791.67	438.33	353.34	2.241		
14,300.00	7,935.97	14,408.30	7,888.97	179.02	180.65	86.60	1,596.00	-6,774.84	791.68	433.04	358.64	2.207		
14,400.00	7,935.97	14,508.30	7,888.97	181.67	183.29	86.60	1,596.44	-6,874.84	791.68	427.74	363.93	2.175		
14,500.00	7,935.97	14,608.30	7,888.97	184.32	185.93	86.60	1,596.87	-6,974.84	791.68	422.45	369.23	2.144		
14,600.00	7,935.97	14,708.30	7,888.97	186.97	188.57	86.60	1,597.31	-7,074.84	791.68	417.15	374.53	2.114		
14,700.00	7,935.97	14,808.30	7,888.97	189.63	191.21	86.60	1,597.75	-7,174.84	791.68	411.85	379.83	2.084		
14,800.00	7,935.97	14,908.30	7,888.97	192.28	193.86	86.60	1,598.19	-7,274.84	791.68	406.54	385.14	2.056		
14,900.00	7,935.97	15,008.30	7,888.97	194.94	196.51	86.60	1,598.63	-7,374.83	791.68	401.24	390.44	2.028		
15,000.00	7,935.97	15,108.30	7,888.97	197.60	199.15	86.60	1,599.07	-7,474.83	791.68	395.93	395.75	2.000		
15,100.00	7,935.97	15,208.30	7,888.97	200.26	201.80	86.60	1,599.51	-7,574.83	791.68	390.62	401.06	1.974		
15,200.00	7,935.97	15,308.30	7,888.97	202.91	204.45	86.60	1,599.94	-7,674.83	791.69	385.31	406.37	1.948		
15,300.00	7,935.97	15,408.30	7,888.97	205.57	207.10	86.60	1,600.38	-7,774.83	791.69	380.00	411.69	1.923		
15,400.00	7,935.97	15,508.31	7,888.98	208.24	209.76	86.60	1,600.82	-7,874.82	791.69	374.69	417.00	1.899		
15,500.00	7,935.97	15,608.31	7,888.98	210.90	212.41	86.60	1,601.26	-7,974.82	791.69	369.38	422.32	1.875		
15,600.00	7,935.96	15,708.31	7,888.98	213.56	215.06	86.60	1,601.70	-8,074.82	791.69	364.06	427.63	1.851		
15,700.00	7,935.96	15,808.31	7,888.98	216.22	217.72	86.60	1,602.14	-8,174.82	791.69	358.74	432.95	1.829		
15,800.00	7,935.96	15,908.31	7,888.98	218.89	220.37	86.60	1,602.58	-8,274.82	791.70	353.43	438.27	1.806		
15,900.00	7,935.96	16,008.31	7,888.98	221.55	223.03	86.60	1,603.02	-8,374.81	791.70	348.11	443.59	1.785		
16,000.00	7,935.96	16,108.31	7,888.98	224.21	225.69	86.60	1,603.46	-8,474.81	791.70	342.79	448.91	1.764		
16,100.00	7,935.96	16,208.31	7,888.98	226.88	228.35	86.60	1,603.90	-8,574.81	791.70	337.47	454.24	1.743		
16,200.00	7,935.96	16,308.31	7,888.98	229.55	231.01	86.60	1,604.34	-8,674.81	791.71	332.15	459.56	1.723		
16,300.00	7,935.96	16,408.31	7,888.98	232.21	233.67	86.60	1,604.78	-8,774.81	791.71	326.82	464.89	1.703		
16,400.00	7,935.96	16,508.32	7,888.98	234.88	236.33	86.60	1,605.22	-8,874.80	791.71	321.50	470.21	1.684		
16,500.00	7,935.96	16,608.32	7,888.98	237.55	238.99	86.60	1,605.66	-8,974.80	791.72	316.17	475.54	1.665		
16,600.00	7,935.96	16,708.32	7,888.98	240.21	241.65	86.60	1,606.10	-9,074.80	791.72	310.85	480.87	1.646		
16,700.00	7,935.96	16,808.32	7,888.99	242.88	244.31	86.60	1,606.54	-9,174.80	791.72	305.52	486.20	1.628		
16,800.00	7,935.96	16,908.32	7,888.99	245.55	246.97	86.60	1,606.98	-9,274.80	791.73	300.20	491.53	1.611		
16,900.00	7,935.96	17,008.32	7,888.99	248.22	249.64	86.60	1,607.42	-9,374.80	791.73	294.87	496.86	1.593		
17,000.00	7,935.96	17,108.32	7,888.99	250.89	252.30	86.60	1,607.86	-9,474.79	791.73	289.54	502.19	1.577		
17,100.00	7,935.96	17,208.32	7,888.99	253.56	254.97	86.60	1,608.31	-9,574.79	791.74	284.21	507.53	1.560		
17,200.00	7,935.96	17,308.32	7,888.99	256.23	257.63	86.60	1,608.75	-9,674.79	791.74	278.88	512.86	1.544		
17,300.00	7,935.96	17,408.32	7,888.99	258.90	260.30	86.60	1,609.19	-9,774.79	791.75	273.55	518.20	1.528		
17,400.00	7,935.96	17,508.32	7,888.99	261.58	262.96	86.60	1,609.63	-9,874.79	791.75	268.22	523.53	1.512		
17,500.00	7,935.96	17,608.33	7,888.99	264.25	265.63	86.60	1,610.07	-9,974.78	791.75	262.89	528.87	1.497 Level 3		
17,600.00	7,935.96	17,708.33	7,889.00	266.92	268.30	86.60	1,610.51	-10,074.78	791.76	257.55	534.20	1.482 Level 3		
17,700.00	7,935.95	17,808.33	7,889.00	269.59	270.96	86.60	1,610.96	-10,174.78	791.76	252.22	539.54	1.467 Level 3		
17,800.00	7,935.95	17,908.33	7,889.00	272.26	273.63	86.60	1,611.40	-10,274.78	791.77	246.89	544.88	1.453 Level 3		
17,900.00	7,935.95	18,008.33	7,889.00	274.94	276.30	86.60	1,611.84	-10,374.78	791.77	241.55	550.22	1.439 Level 3		
17,997.91	7,936.00	18,089.58	7,889.00	277.56	278.47	86.60	1,612.27	-10,472.68	791.86	236.86	555.00	1.427 Level 3, SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	19.69	19.69					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	19.69	19.69	19.42	0.27	73.227		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	19.69	19.69	18.70	0.99	19.971		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	19.69	19.69	17.98	1.70	11.562		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	19.69	19.69	17.27	2.42	8.136		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	19.69	19.69	16.55	3.14	6.277		
600.00	600.00	600.00	600.00	1.93	1.93	90.00	0.00	19.69	19.69	15.83	3.85	5.109		
700.00	700.00	700.10	700.08	2.29	2.29	84.94	1.71	19.34	19.41	14.84	4.57	4.248		
750.41	750.41	750.47	750.41	2.47	2.47	78.42	3.87	18.89	19.29	14.36	4.93	3.911 CC		
800.00	800.00	799.95	799.79	2.64	2.65	69.51	6.83	18.29	19.52	14.24	5.29	3.693		
900.00	899.98	899.48	898.94	3.00	3.01	67.03	15.32	16.55	21.84	15.84	6.00	3.638		
1,000.00	999.84	998.77	997.48	3.36	3.38	53.70	27.15	14.13	26.07	19.36	6.72	3.883		
1,100.00	1,099.45	1,097.82	1,095.32	3.72	3.76	44.81	42.27	11.03	31.46	24.03	7.42	4.238		
1,173.53	1,172.47	1,170.56	1,166.80	3.99	4.06	40.27	55.47	8.32	35.84	27.90	7.94	4.513		
1,200.00	1,198.72	1,203.03	1,192.70	4.09	4.19	38.99	60.54	7.29	37.43	29.27	8.16	4.587		
1,300.00	1,297.87	1,303.26	1,290.54	4.47	4.62	35.00	79.67	3.37	43.58	34.68	8.90	4.897		
1,400.00	1,397.02	1,403.49	1,388.38	4.85	5.05	32.01	98.80	-0.55	49.89	40.25	9.64	5.174		
1,500.00	1,496.17	1,503.71	1,486.22	5.24	5.50	29.70	117.93	-4.47	56.31	45.92	10.39	5.420		
1,600.00	1,595.32	1,596.06	1,584.06	5.63	5.91	27.86	137.06	-8.39	62.79	51.69	11.11	5.654		
1,700.00	1,694.47	1,704.17	1,681.90	6.03	6.40	26.37	156.19	-12.31	69.33	57.45	11.89	5.833		
1,800.00	1,793.62	1,804.40	1,779.75	6.43	6.86	25.13	175.33	-16.23	75.91	63.28	12.64	6.007		
1,900.00	1,892.78	1,904.63	1,877.59	6.83	7.32	24.09	194.46	-20.15	82.52	69.13	13.39	6.164		
2,000.00	1,991.93	2,004.86	1,975.43	7.23	7.78	23.21	213.59	-24.07	89.15	75.01	14.14	6.305		
2,100.00	2,091.08	2,105.09	2,073.27	7.63	8.24	22.45	232.72	-27.99	95.80	80.91	14.89	6.433		
2,200.00	2,190.23	2,205.32	2,171.11	8.04	8.71	21.78	251.85	-31.91	102.46	86.82	15.65	6.549		
2,300.00	2,289.38	2,305.54	2,268.95	8.44	9.18	21.20	270.99	-35.82	109.14	92.74	16.40	6.655		
2,400.00	2,388.53	2,394.23	2,366.79	8.85	9.59	20.69	290.12	-39.74	115.82	98.71	17.11	6.770		
2,500.00	2,487.68	2,506.00	2,464.63	9.25	10.12	20.23	309.25	-43.66	122.52	104.61	17.91	6.841		
2,600.00	2,586.83	2,593.77	2,562.48	9.66	10.53	19.82	328.38	-47.58	129.22	110.60	18.62	6.941		
2,700.00	2,685.99	2,706.46	2,660.32	10.07	11.06	19.45	347.51	-51.50	135.93	116.51	19.42	6.999		
2,800.00	2,785.14	2,806.69	2,758.16	10.48	11.53	19.11	366.64	-55.42	142.64	122.46	20.18	7.070		
2,900.00	2,884.29	2,906.92	2,856.00	10.89	12.01	18.81	385.78	-59.34	149.35	128.42	20.93	7.135		
3,000.00	2,983.44	2,992.85	2,953.84	11.30	12.41	18.53	404.91	-63.26	156.07	134.44	21.63	7.215		
3,100.00	3,082.59	3,107.38	3,051.68	11.71	12.96	18.27	424.04	-67.18	162.80	140.35	22.45	7.253		
3,200.00	3,181.74	3,192.40	3,149.52	12.12	13.36	18.04	443.17	-71.10	169.52	146.38	23.14	7.325		
3,300.00	3,280.89	3,307.83	3,247.36	12.53	13.90	17.82	462.30	-75.02	176.25	152.29	23.96	7.356		
3,400.00	3,380.04	3,408.06	3,345.21	12.94	14.38	17.62	481.43	-78.94	182.98	158.27	24.72	7.403		
3,500.00	3,479.20	3,508.29	3,443.05	13.35	14.86	17.43	500.57	-82.86	189.72	164.24	25.47	7.448		
3,600.00	3,578.35	3,608.52	3,540.89	13.76	15.33	17.26	519.70	-86.77	196.45	170.22	26.23	7.489		
3,700.00	3,677.50	3,691.25	3,638.73	14.17	15.73	17.09	538.83	-90.69	203.19	176.27	26.92	7.548		
3,800.00	3,776.65	3,808.98	3,736.57	14.58	16.29	16.94	557.96	-94.61	209.93	182.18	27.75	7.566		
3,900.00	3,875.80	3,909.21	3,834.41	14.99	16.76	16.80	577.09	-98.53	216.67	188.16	28.50	7.601		
4,000.00	3,974.95	4,009.43	3,932.25	15.41	17.24	16.66	596.22	-102.45	223.41	194.15	29.26	7.635		
4,100.00	4,074.10	4,109.66	4,030.09	15.82	17.72	16.54	615.36	-106.37	230.15	200.13	30.02	7.666		
4,200.00	4,173.25	4,209.89	4,127.93	16.23	18.19	16.42	634.49	-110.29	236.90	206.12	30.78	7.697		
4,300.00	4,272.40	4,289.88	4,225.78	16.64	18.57	16.30	653.62	-114.21	243.64	212.18	31.46	7.745		
4,400.00	4,371.56	4,389.65	4,323.62	17.06	19.05	16.20	672.75	-118.13	250.39	218.17	32.22	7.772		
4,500.00	4,470.71	4,489.42	4,421.46	17.47	19.53	16.10	691.88	-122.05	257.13	224.16	32.97	7.799		
4,600.00	4,569.86	4,589.19	4,519.30	17.88	20.00	16.00	711.01	-125.97	263.88	230.15	33.73	7.824		
4,700.00	4,669.01	4,688.96	4,617.14	18.29	20.48	15.91	730.15	-129.89	270.63	236.14	34.49	7.848		
4,800.00	4,768.16	4,788.73	4,714.98	18.71	20.95	15.82	749.28	-133.80	277.38	242.13	35.24	7.871		
4,900.00	4,867.31	4,888.51	4,812.82	19.12	21.43	15.74	768.41	-137.72	284.12	248.13	36.00	7.893		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,988.28	4,910.66	19.53	21.91	15.66	787.54	-141.64	290.87	254.12	36.76	7.914		
5,100.00	5,065.61	5,088.05	5,008.51	19.95	22.38	15.59	806.67	-145.56	297.62	260.11	37.51	7.934		
5,200.00	5,164.77	5,187.82	5,106.35	20.36	22.86	15.52	825.81	-149.48	304.37	266.10	38.27	7.953		
5,300.00	5,263.92	5,287.59	5,204.19	20.77	23.33	15.45	844.94	-153.40	311.13	272.10	39.03	7.972		
5,400.00	5,363.07	5,387.36	5,302.03	21.18	23.81	15.38	864.07	-157.32	317.88	278.09	39.78	7.990		
5,500.00	5,462.22	5,487.13	5,399.87	21.60	24.29	15.32	883.20	-161.24	324.63	284.09	40.54	8.007		
5,600.00	5,561.37	5,586.90	5,497.71	22.01	24.76	15.26	902.33	-165.16	331.38	290.08	41.30	8.024		
5,700.00	5,660.52	5,686.68	5,595.55	22.43	25.24	15.20	921.46	-169.08	338.13	296.08	42.06	8.040		
5,800.00	5,759.67	5,786.45	5,693.39	22.84	25.72	15.14	940.60	-173.00	344.89	302.07	42.81	8.055		
5,900.00	5,858.82	5,886.22	5,791.24	23.25	26.19	15.09	959.73	-176.92	351.64	308.07	43.57	8.070		
6,000.00	5,957.97	5,985.99	5,889.08	23.67	26.67	15.04	978.86	-180.84	358.39	314.06	44.33	8.085		
6,100.00	6,057.13	6,085.76	5,986.92	24.08	27.15	14.99	997.99	-184.75	365.15	320.06	45.09	8.099		
6,200.00	6,156.28	6,185.53	6,084.76	24.49	27.62	14.94	1,017.12	-188.67	371.90	326.06	45.84	8.112		
6,300.00	6,255.43	6,285.30	6,182.60	24.91	28.10	14.89	1,036.25	-192.59	378.66	332.05	46.60	8.125		
6,400.00	6,354.58	6,385.07	6,280.44	25.32	28.58	14.85	1,055.39	-196.51	385.41	338.05	47.36	8.138		
6,500.00	6,453.73	6,484.85	6,378.28	25.73	29.06	14.81	1,074.52	-200.43	392.16	344.05	48.12	8.150		
6,600.00	6,552.88	6,584.62	6,476.12	26.15	29.53	14.77	1,093.65	-204.35	398.92	350.05	48.87	8.162		
6,700.00	6,652.03	6,684.39	6,573.97	26.56	30.01	14.73	1,112.78	-208.27	405.67	356.04	49.63	8.174		
6,800.00	6,751.18	6,797.67	6,685.35	26.98	30.54	14.72	1,132.97	-212.40	411.08	360.59	50.49	8.142		
6,900.00	6,850.34	6,914.12	6,800.60	27.39	31.03	14.84	1,149.26	-215.74	412.56	361.26	51.31	8.041		
7,000.00	6,949.49	7,030.50	6,916.36	27.80	31.47	15.07	1,160.94	-218.14	410.05	358.00	52.05	7.878		
7,011.14	6,960.53	7,043.44	6,929.26	27.85	31.52	15.11	1,161.95	-218.34	409.53	357.40	52.13	7.857		
7,100.00	7,048.80	7,146.56	7,032.19	28.21	31.86	15.35	1,167.99	-219.58	404.90	352.19	52.71	7.682		
7,200.00	7,148.46	7,262.31	7,147.90	28.58	32.21	15.61	1,170.45	-220.08	399.13	345.84	53.28	7.490		
7,300.00	7,248.35	7,362.23	7,247.67	28.94	32.49	15.23	1,170.47	-223.86	394.64	340.69	53.95	7.315		
7,359.86	7,308.20	7,420.26	7,304.89	29.13	32.67	13.87	1,170.51	-233.42	393.80	339.49	54.32	7.250		
7,384.67	7,333.00	7,443.63	7,327.61	29.21	32.74	-2.73	1,170.53	-238.89	393.97	339.50	54.47	7.233		
7,400.00	7,348.33	7,457.84	7,341.30	29.26	32.79	-3.28	1,170.55	-242.67	394.21	339.64	54.57	7.224		
7,414.67	7,363.00	7,471.23	7,354.13	29.31	32.83	-3.84	1,170.57	-246.55	394.50	339.84	54.66	7.217		
7,450.00	7,398.31	7,503.04	7,384.18	29.42	32.93	84.44	1,170.61	-256.94	395.43	340.53	54.90	7.203		
7,500.00	7,448.02	7,547.24	7,424.90	29.58	33.08	82.43	1,170.69	-274.11	397.16	341.90	55.26	7.188		
7,550.00	7,497.08	7,590.59	7,463.43	29.75	33.23	80.49	1,170.77	-293.96	399.32	343.69	55.63	7.179		
7,600.00	7,545.12	7,633.18	7,499.71	29.93	33.38	78.64	1,170.87	-316.23	401.83	345.84	55.99	7.176		
7,650.00	7,591.77	7,675.08	7,533.70	30.11	33.53	76.88	1,170.98	-340.72	404.61	348.27	56.34	7.181		
7,700.00	7,636.69	7,716.36	7,565.35	30.30	33.69	75.23	1,171.10	-367.21	407.59	350.92	56.67	7.192		
7,750.00	7,679.52	7,757.09	7,594.63	30.49	33.85	73.70	1,171.22	-395.51	410.68	353.70	56.98	7.207		
7,800.00	7,719.94	7,797.34	7,621.52	30.70	34.02	72.28	1,171.35	-425.45	413.79	356.51	57.28	7.224		
7,850.00	7,757.65	7,837.16	7,645.98	30.91	34.19	70.99	1,171.49	-456.86	416.87	359.27	57.59	7.238		
7,900.00	7,792.35	7,876.60	7,668.01	31.14	34.38	69.82	1,171.63	-489.56	419.82	361.89	57.93	7.247		
7,950.00	7,823.79	7,915.71	7,687.58	31.39	34.58	68.79	1,171.78	-523.42	422.60	364.29	58.31	7.247		
8,000.00	7,851.72	7,954.55	7,704.68	31.67	34.80	67.88	1,171.93	-558.28	425.14	366.38	58.76	7.235		
8,050.00	7,875.93	7,993.14	7,719.30	31.99	35.03	67.11	1,172.09	-593.99	427.39	368.08	59.31	7.206		
8,100.00	7,896.23	8,031.54	7,731.43	32.35	35.29	66.48	1,172.25	-630.42	429.31	369.34	59.97	7.159		
8,150.00	7,912.48	8,069.79	7,741.05	32.75	35.57	65.98	1,172.41	-667.43	430.86	370.12	60.74	7.093		
8,200.00	7,924.55	8,107.92	7,748.17	33.20	35.87	65.62	1,172.58	-704.88	432.01	370.36	61.65	7.007		
8,250.00	7,932.35	8,145.97	7,752.78	33.70	36.19	65.39	1,172.74	-742.64	432.74	370.05	62.70	6.902		
8,300.00	7,935.81	8,183.98	7,754.86	34.24	36.54	65.29	1,172.91	-780.58	433.04	369.17	63.87	6.780		
8,314.73	7,936.00	8,196.48	7,755.00	34.41	36.66	65.29	1,172.97	-793.08	433.05	368.82	64.23	6.742		
8,316.12	7,936.00	8,196.82	7,755.00	34.42	36.67	65.29	1,172.96	-792.75	433.05	368.76	64.29	6.736		
8,400.00	7,936.00	8,280.03	7,755.00	35.44	37.54	65.29	1,173.33	-876.63	433.05	366.70	66.35	6.526		
8,500.00	7,936.00	8,380.03	7,755.00	36.82	38.75	65.29	1,173.77	-976.63	433.05	364.00	69.05	6.271		
8,600.00	7,936.00	8,480.03	7,755.00	38.34	40.13	65.29	1,174.21	-1,076.63	433.05	361.06	71.99	6.015		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-3 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,700.00	7,936.00	8,580.03	7,755.00	39.99	41.65	65.29	1,174.65	-1,176.63	433.05	357.91	75.14	5.763		
8,800.00	7,936.00	8,680.03	7,754.99	41.75	43.30	65.29	1,175.09	-1,276.63	433.06	354.58	78.48	5.518		
8,900.00	7,936.00	8,780.03	7,754.99	43.62	45.06	65.29	1,175.53	-1,376.63	433.06	351.09	81.97	5.283		
9,000.00	7,936.00	8,880.03	7,754.99	45.56	46.93	65.29	1,175.97	-1,476.63	433.06	347.45	85.61	5.059		
9,100.00	7,936.00	8,980.03	7,754.99	47.59	48.87	65.29	1,176.41	-1,576.63	433.06	343.69	89.37	4.846		
9,200.00	7,936.00	9,080.03	7,754.99	49.67	50.89	65.29	1,176.84	-1,676.62	433.06	339.82	93.24	4.645		
9,300.00	7,936.00	9,180.03	7,754.99	51.82	52.98	65.29	1,177.28	-1,776.62	433.07	335.86	97.21	4.455		
9,400.00	7,935.99	9,280.03	7,754.99	54.01	55.12	65.29	1,177.72	-1,876.62	433.07	331.80	101.26	4.277		
9,500.00	7,935.99	9,380.03	7,754.99	56.25	57.31	65.29	1,178.16	-1,976.62	433.07	327.68	105.39	4.109		
9,600.00	7,935.99	9,480.03	7,754.98	58.53	59.55	65.29	1,178.60	-2,076.62	433.07	323.48	109.59	3.952		
9,700.00	7,935.99	9,580.03	7,754.98	60.84	61.82	65.29	1,179.04	-2,176.62	433.07	319.23	113.84	3.804		
9,800.00	7,935.99	9,680.03	7,754.98	63.18	64.12	65.29	1,179.48	-2,276.62	433.07	314.93	118.15	3.666		
9,900.00	7,935.99	9,780.03	7,754.98	65.55	66.46	65.29	1,179.92	-2,376.62	433.08	310.57	122.50	3.535		
10,000.00	7,935.99	9,880.03	7,754.98	67.94	68.82	65.29	1,180.36	-2,476.62	433.08	306.18	126.90	3.413		
10,100.00	7,935.99	9,980.03	7,754.98	70.35	71.21	65.29	1,180.80	-2,576.62	433.08	301.74	131.34	3.297		
10,200.00	7,935.99	10,080.03	7,754.98	72.79	73.62	65.29	1,181.23	-2,676.62	433.08	297.28	135.81	3.189		
10,300.00	7,935.99	10,180.03	7,754.98	75.24	76.05	65.29	1,181.67	-2,776.61	433.08	292.78	140.31	3.087		
10,400.00	7,935.99	10,280.03	7,754.98	77.70	78.49	65.29	1,182.11	-2,876.61	433.09	288.25	144.84	2.990		
10,500.00	7,935.99	10,380.03	7,754.97	80.19	80.95	65.29	1,182.55	-2,976.61	433.09	283.69	149.39	2.899		
10,600.00	7,935.99	10,480.03	7,754.97	82.68	83.43	65.29	1,182.99	-3,076.61	433.09	279.12	153.97	2.813		
10,700.00	7,935.99	10,580.03	7,754.97	85.19	85.92	65.29	1,183.43	-3,176.61	433.09	274.52	158.57	2.731		
10,800.00	7,935.99	10,680.03	7,754.97	87.70	88.42	65.29	1,183.87	-3,276.61	433.09	269.90	163.19	2.654		
10,900.00	7,935.99	10,780.03	7,754.97	90.23	90.93	65.29	1,184.31	-3,376.61	433.10	265.26	167.83	2.581		
11,000.00	7,935.99	10,880.03	7,754.97	92.77	93.46	65.29	1,184.75	-3,476.61	433.10	260.61	172.49	2.511		
11,100.00	7,935.99	10,980.03	7,754.97	95.31	95.99	65.29	1,185.19	-3,576.61	433.10	255.94	177.15	2.445		
11,200.00	7,935.99	11,080.03	7,754.97	97.87	98.53	65.29	1,185.62	-3,676.61	433.10	251.26	181.84	2.382		
11,300.00	7,935.99	11,180.03	7,754.96	100.43	101.08	65.29	1,186.06	-3,776.60	433.10	246.57	186.54	2.322		
11,400.00	7,935.99	11,280.03	7,754.96	102.99	103.63	65.29	1,186.50	-3,876.60	433.10	241.86	191.24	2.265		
11,500.00	7,935.98	11,380.03	7,754.96	105.57	106.19	65.29	1,186.94	-3,976.60	433.11	237.14	195.96	2.210		
11,600.00	7,935.98	11,480.03	7,754.96	108.15	108.76	65.29	1,187.38	-4,076.60	433.11	232.41	200.69	2.158		
11,700.00	7,935.98	11,580.03	7,754.96	110.73	111.34	65.29	1,187.82	-4,176.60	433.11	227.68	205.43	2.108		
11,800.00	7,935.98	11,680.03	7,754.96	113.32	113.92	65.29	1,188.26	-4,276.60	433.11	222.93	210.18	2.061		
11,900.00	7,935.98	11,780.03	7,754.96	115.91	116.50	65.29	1,188.70	-4,376.60	433.11	218.17	214.94	2.015		
12,000.00	7,935.98	11,880.03	7,754.96	118.51	119.09	65.29	1,189.14	-4,476.60	433.12	213.41	219.71	1.971		
12,100.00	7,935.98	11,980.03	7,754.96	121.11	121.68	65.29	1,189.58	-4,576.60	433.12	208.64	224.48	1.929		
12,200.00	7,935.98	12,080.03	7,754.95	123.72	124.28	65.29	1,190.01	-4,676.60	433.12	203.86	229.26	1.889		
12,300.00	7,935.98	12,180.03	7,754.95	126.33	126.88	65.29	1,190.45	-4,776.60	433.12	199.08	234.04	1.851		
12,400.00	7,935.98	12,280.03	7,754.95	128.94	129.49	65.29	1,190.89	-4,876.59	433.12	194.29	238.84	1.813		
12,500.00	7,935.98	12,380.03	7,754.95	131.56	132.10	65.29	1,191.33	-4,976.59	433.13	189.49	243.63	1.778		
12,600.00	7,935.98	12,480.03	7,754.95	134.17	134.71	65.29	1,191.77	-5,076.59	433.13	184.69	248.44	1.743		
12,700.00	7,935.98	12,580.03	7,754.95	136.80	137.33	65.29	1,192.21	-5,176.59	433.13	179.88	253.24	1.710		
12,800.00	7,935.98	12,680.03	7,754.95	139.42	139.94	65.29	1,192.65	-5,276.59	433.13	175.07	258.06	1.678		
12,900.00	7,935.98	12,780.03	7,754.95	142.05	142.56	65.29	1,193.09	-5,376.59	433.13	170.26	262.88	1.648		
13,000.00	7,935.98	12,880.03	7,754.94	144.68	145.19	65.29	1,193.53	-5,476.59	433.13	165.44	267.70	1.618		
13,100.00	7,935.98	12,980.03	7,754.94	147.31	147.81	65.29	1,193.97	-5,576.59	433.14	160.61	272.52	1.589		
13,200.00	7,935.98	13,080.03	7,754.94	149.94	150.44	65.29	1,194.40	-5,676.59	433.14	155.79	277.35	1.562		
13,300.00	7,935.98	13,180.03	7,754.94	152.57	153.07	65.29	1,194.84	-5,776.59	433.14	150.95	282.19	1.535		
13,400.00	7,935.98	13,280.03	7,754.94	155.21	155.70	65.29	1,195.28	-5,876.58	433.14	146.12	287.02	1.509		
13,500.00	7,935.97	13,380.03	7,754.94	157.85	158.34	65.29	1,195.72	-5,976.58	433.14	141.28	291.86	1.484 Level 3		
13,600.00	7,935.97	13,480.03	7,754.94	160.49	160.97	65.29	1,196.16	-6,076.58	433.15	136.44	296.71	1.460 Level 3		
13,700.00	7,935.97	13,580.03	7,754.94	163.13	163.61	65.29	1,196.60	-6,176.58	433.15	131.59	301.55	1.436 Level 3		
13,800.00	7,935.97	13,680.03	7,754.93	165.78	166.25	65.29	1,197.04	-6,276.58	433.15	126.75	306.40	1.414 Level 3		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	7,935.97	13,780.03	7,754.93	168.42	168.89	65.29	1,197.48	-6,376.58	433.15	121.90	311.26	1.392	Level 3	
14,000.00	7,935.97	13,880.03	7,754.93	171.07	171.54	65.29	1,197.92	-6,476.58	433.15	117.04	316.11	1.370	Level 3	
14,100.00	7,935.97	13,980.03	7,754.93	173.72	174.18	65.29	1,198.36	-6,576.58	433.16	112.19	320.97	1.350	Level 3	
14,200.00	7,935.97	14,080.03	7,754.93	176.36	176.82	65.29	1,198.79	-6,676.58	433.16	107.33	325.83	1.329	Level 3	
14,300.00	7,935.97	14,180.03	7,754.93	179.02	179.47	65.29	1,199.23	-6,776.58	433.16	102.47	330.69	1.310	Level 3	
14,400.00	7,935.97	14,280.03	7,754.93	181.67	182.12	65.29	1,199.67	-6,876.57	433.16	97.61	335.55	1.291	Level 3	
14,500.00	7,935.97	14,380.03	7,754.93	184.32	184.77	65.29	1,200.11	-6,976.57	433.16	92.75	340.42	1.272	Level 3	
14,600.00	7,935.97	14,480.03	7,754.93	186.97	187.42	65.29	1,200.55	-7,076.57	433.16	87.88	345.29	1.255	Level 3	
14,700.00	7,935.97	14,580.03	7,754.92	189.63	190.07	65.29	1,200.99	-7,176.57	433.17	83.01	350.16	1.237	Level 2	
14,800.00	7,935.97	14,680.03	7,754.92	192.28	192.72	65.29	1,201.43	-7,276.57	433.17	78.14	355.03	1.220	Level 2	
14,900.00	7,935.97	14,780.03	7,754.92	194.94	195.38	65.29	1,201.87	-7,376.57	433.17	73.27	359.90	1.204	Level 2	
15,000.00	7,935.97	14,880.03	7,754.92	197.60	198.03	65.29	1,202.31	-7,476.57	433.17	68.40	364.77	1.188	Level 2	
15,100.00	7,935.97	14,980.03	7,754.92	200.26	200.69	65.29	1,202.75	-7,576.57	433.17	63.52	369.65	1.172	Level 2	
15,200.00	7,935.97	15,080.03	7,754.92	202.91	203.34	65.29	1,203.19	-7,676.57	433.18	58.65	374.53	1.157	Level 2	
15,300.00	7,935.97	15,180.03	7,754.92	205.57	206.00	65.29	1,203.62	-7,776.57	433.18	53.77	379.41	1.142	Level 2	
15,400.00	7,935.97	15,280.03	7,754.92	208.24	208.66	65.29	1,204.06	-7,876.57	433.18	48.89	384.29	1.127	Level 2	
15,500.00	7,935.97	15,380.03	7,754.91	210.90	211.32	65.29	1,204.50	-7,976.56	433.18	44.01	389.17	1.113	Level 2	
15,600.00	7,935.96	15,480.03	7,754.91	213.56	213.98	65.29	1,204.94	-8,076.56	433.18	39.13	394.06	1.099	Level 2	
15,700.00	7,935.96	15,580.03	7,754.91	216.22	216.64	65.29	1,205.38	-8,176.56	433.19	34.24	398.94	1.086	Level 2	
15,800.00	7,935.96	15,680.03	7,754.91	218.89	219.30	65.29	1,205.82	-8,276.56	433.19	29.36	403.83	1.073	Level 2	
15,900.00	7,935.96	15,780.03	7,754.91	221.55	221.96	65.29	1,206.26	-8,376.56	433.19	24.47	408.72	1.060	Level 2	
16,000.00	7,935.96	15,880.03	7,754.91	224.21	224.62	65.29	1,206.70	-8,476.56	433.19	19.59	413.60	1.047	Level 2	
16,100.00	7,935.96	15,980.03	7,754.91	226.88	227.29	65.29	1,207.14	-8,576.56	433.19	14.70	418.49	1.035	Level 2	
16,200.00	7,935.96	16,080.03	7,754.91	229.55	229.95	65.29	1,207.58	-8,676.56	433.20	9.81	423.38	1.023	Level 2	
16,300.00	7,935.96	16,180.03	7,754.91	232.21	232.62	65.29	1,208.01	-8,776.56	433.20	4.92	428.28	1.011	Level 2	
16,400.00	7,935.96	16,280.03	7,754.90	234.88	235.28	65.29	1,208.45	-8,876.56	433.20	0.03	433.17	1.000	Level 2	
16,500.00	7,935.96	16,380.03	7,754.90	237.55	237.95	65.29	1,208.89	-8,976.55	433.20	-4.86	438.06	0.989	Level 1	
16,600.00	7,935.96	16,480.03	7,754.90	240.21	240.61	65.29	1,209.33	-9,076.55	433.20	-9.75	442.96	0.978	Level 1	
16,700.00	7,935.96	16,580.03	7,754.90	242.88	243.28	65.29	1,209.77	-9,176.55	433.20	-14.65	447.85	0.967	Level 1	
16,800.00	7,935.96	16,680.03	7,754.90	245.55	245.95	65.29	1,210.21	-9,276.55	433.21	-19.54	452.75	0.957	Level 1	
16,900.00	7,935.96	16,780.03	7,754.90	248.22	248.61	65.29	1,210.65	-9,376.55	433.21	-24.44	457.65	0.947	Level 1	
17,000.00	7,935.96	16,880.03	7,754.90	250.89	251.28	65.29	1,211.09	-9,476.55	433.21	-29.33	462.54	0.937	Level 1	
17,100.00	7,935.96	16,980.03	7,754.90	253.56	253.95	65.29	1,211.53	-9,576.55	433.21	-34.23	467.44	0.927	Level 1	
17,200.00	7,935.96	17,080.03	7,754.89	256.23	256.62	65.29	1,211.97	-9,676.55	433.21	-39.13	472.34	0.917	Level 1	
17,300.00	7,935.96	17,180.03	7,754.89	258.90	259.29	65.29	1,212.40	-9,776.55	433.22	-44.03	477.24	0.908	Level 1	
17,400.00	7,935.96	17,280.03	7,754.89	261.58	261.96	65.29	1,212.84	-9,876.55	433.22	-48.93	482.15	0.899	Level 1	
17,500.00	7,935.96	17,380.03	7,754.89	264.25	264.63	65.29	1,213.28	-9,976.55	433.22	-53.83	487.05	0.889	Level 1	
17,600.00	7,935.96	17,480.03	7,754.89	266.92	267.30	65.29	1,213.72	-10,076.54	433.22	-58.73	491.95	0.881	Level 1	
17,700.00	7,935.95	17,580.03	7,754.89	269.59	269.97	65.29	1,214.16	-10,176.54	433.22	-63.63	496.85	0.872	Level 1	
17,800.00	7,935.95	17,680.03	7,754.89	272.26	272.64	65.29	1,214.60	-10,276.54	433.23	-68.53	501.76	0.863	Level 1	
17,900.00	7,935.95	17,780.03	7,754.89	274.94	275.31	65.29	1,215.04	-10,376.54	433.23	-73.43	506.66	0.855	Level 1	
17,997.91	7,936.00	17,879.45	7,755.00	277.56	277.97	65.29	1,215.22	-10,475.96	433.05	-78.38	511.43	0.847	Level 1, ES, SF	

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-5 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-16.87	16.87					
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-16.87	16.87	16.61	0.27	62.766		
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-16.87	16.87	15.89	0.99	17.118		
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-16.87	16.87	15.17	1.70	9.910		
400.00	400.00	400.00	400.00	1.21	1.21	-90.00	0.00	-16.87	16.87	14.46	2.42	6.974		
500.00	500.00	500.00	500.00	1.57	1.57	-90.00	0.00	-16.87	16.87	13.74	3.14	5.380		
600.00	600.00	600.00	600.00	1.93	1.93	-90.00	0.00	-16.87	16.87	13.02	3.85	4.379		
700.00	700.00	700.00	700.00	2.29	2.29	-90.00	0.00	-16.87	16.87	12.30	4.57	3.692		
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-16.87	16.87	11.59	5.29	3.192		
900.00	899.98	900.02	899.98	3.00	3.00	-80.04	0.00	-16.87	16.49	10.48	6.00	2.746		
962.35	962.26	962.26	962.26	3.23	3.23	-90.00	0.00	-16.87	16.24	9.79	6.45	2.517 CC		
1,000.00	999.84	999.84	999.84	3.36	3.36	-98.32	0.00	-16.87	16.41	9.69	6.72	2.442		
1,100.00	1,099.45	1,099.67	1,099.65	3.72	3.72	-119.43	1.53	-17.69	19.08	11.64	7.44	2.565		
1,173.53	1,172.47	1,173.21	1,173.11	3.99	3.98	-130.00	4.62	-19.34	22.69	14.72	7.97	2.847		
1,200.00	1,198.72	1,199.73	1,199.57	4.09	4.08	-132.66	6.14	-20.16	24.13	15.97	8.16	2.957		
1,300.00	1,297.87	1,300.46	1,299.13	4.47	4.44	-139.42	12.36	-23.48	29.60	20.71	8.89	3.330		
1,400.00	1,397.02	1,400.65	1,398.69	4.85	4.80	-144.02	18.57	-26.81	35.35	25.73	9.62	3.675		
1,500.00	1,496.17	1,500.85	1,498.24	5.24	5.16	-147.32	24.79	-30.13	41.26	30.92	10.35	3.987		
1,600.00	1,595.32	1,601.05	1,597.79	5.63	5.53	-149.79	31.01	-33.46	47.28	36.20	11.08	4.267		
1,700.00	1,694.47	1,701.25	1,697.34	6.03	5.90	-151.70	37.23	-36.79	53.36	41.55	11.81	4.518		
1,800.00	1,793.62	1,801.45	1,796.89	6.43	6.27	-153.22	43.45	-40.11	59.49	46.95	12.54	4.743		
1,900.00	1,892.78	1,901.65	1,896.44	6.83	6.63	-154.45	49.67	-43.44	65.65	52.38	13.28	4.945		
2,000.00	1,991.93	2,001.85	1,995.99	7.23	7.00	-155.47	55.89	-46.76	71.84	57.83	14.01	5.128		
2,100.00	2,091.08	2,102.05	2,095.54	7.63	7.37	-156.33	62.10	-50.09	78.05	63.30	14.74	5.293		
2,200.00	2,190.23	2,202.25	2,195.10	8.04	7.75	-157.06	68.32	-53.42	84.27	68.79	15.48	5.444		
2,300.00	2,289.38	2,302.45	2,294.65	8.44	8.12	-157.70	74.54	-56.74	90.50	74.29	16.21	5.582		
2,400.00	2,388.53	2,402.65	2,394.20	8.85	8.49	-158.25	80.76	-60.07	96.75	79.80	16.95	5.708		
2,500.00	2,487.68	2,497.16	2,493.75	9.25	8.84	-158.73	86.98	-63.39	103.00	85.33	17.66	5.831		
2,600.00	2,586.83	2,603.04	2,593.30	9.66	9.23	-159.16	93.20	-66.72	109.26	90.83	18.42	5.931		
2,700.00	2,685.99	2,703.24	2,692.85	10.07	9.61	-159.54	99.42	-70.05	115.52	96.36	19.16	6.030		
2,800.00	2,785.14	2,803.44	2,792.40	10.48	9.98	-159.88	105.63	-73.37	121.79	101.89	19.89	6.122		
2,900.00	2,884.29	2,903.64	2,891.96	10.89	10.35	-160.19	111.85	-76.70	128.06	107.43	20.63	6.208		
3,000.00	2,983.44	3,003.84	2,991.51	11.30	10.73	-160.47	118.07	-80.02	134.33	112.97	21.37	6.287		
3,100.00	3,082.59	3,104.04	3,091.06	11.71	11.10	-160.73	124.29	-83.35	140.61	118.51	22.10	6.362		
3,200.00	3,181.74	3,204.24	3,190.61	12.12	11.47	-160.96	130.51	-86.68	146.89	124.05	22.84	6.432		
3,300.00	3,280.89	3,304.44	3,290.16	12.53	11.85	-161.17	136.73	-90.00	153.17	129.60	23.58	6.497		
3,400.00	3,380.04	3,404.64	3,389.71	12.94	12.22	-161.37	142.95	-93.33	159.46	135.14	24.31	6.559		
3,500.00	3,479.20	3,504.84	3,489.26	13.35	12.59	-161.55	149.16	-96.65	165.74	140.69	25.05	6.617		
3,600.00	3,578.35	3,605.03	3,588.82	13.76	12.97	-161.72	155.38	-99.98	172.03	146.24	25.79	6.671		
3,700.00	3,677.50	3,705.23	3,688.37	14.17	13.34	-161.88	161.60	-103.31	178.32	151.80	26.52	6.723		
3,800.00	3,776.65	3,794.57	3,787.92	14.58	13.68	-162.02	167.82	-106.63	184.61	157.39	27.22	6.782		
3,900.00	3,875.80	3,905.63	3,887.47	14.99	14.09	-162.16	174.04	-109.96	190.90	162.90	28.00	6.818		
4,000.00	3,974.95	4,005.83	3,987.02	15.41	14.47	-162.29	180.26	-113.28	197.20	168.46	28.74	6.862		
4,100.00	4,074.10	4,093.97	4,086.57	15.82	14.80	-162.41	186.48	-116.61	203.49	174.06	29.43	6.914		
4,200.00	4,173.25	4,206.23	4,186.12	16.23	15.22	-162.52	192.69	-119.94	209.78	179.57	30.21	6.944		
4,300.00	4,272.40	4,306.43	4,285.68	16.64	15.59	-162.63	198.91	-123.26	216.08	185.13	30.95	6.982		
4,400.00	4,371.56	4,406.63	4,385.23	17.06	15.97	-162.73	205.13	-126.59	222.37	190.69	31.69	7.018		
4,500.00	4,470.71	4,506.83	4,484.78	17.47	16.34	-162.82	211.35	-129.91	228.67	196.25	32.42	7.052		
4,600.00	4,569.86	4,607.03	4,584.33	17.88	16.71	-162.91	217.57	-133.24	234.97	201.80	33.16	7.085		
4,700.00	4,669.01	4,707.23	4,683.88	18.29	17.09	-163.00	223.79	-136.57	241.26	207.36	33.90	7.117		
4,800.00	4,768.16	4,807.42	4,783.43	18.71	17.46	-163.08	230.01	-139.89	247.56	212.92	34.64	7.147		
4,900.00	4,867.31	4,907.62	4,882.98	19.12	17.84	-163.16	236.22	-143.22	253.86	218.48	35.38	7.176		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-5 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	5,007.82	4,982.54	19.53	18.21	-163.23	242.44	-146.54	260.16	224.05	36.11	7.204		
5,100.00	5,065.61	5,108.02	5,082.09	19.95	18.59	-163.30	248.66	-149.87	266.46	229.61	36.85	7.230		
5,200.00	5,164.77	5,208.22	5,181.64	20.36	18.96	-163.36	254.88	-153.20	272.76	235.17	37.59	7.256		
5,300.00	5,263.92	5,308.42	5,281.19	20.77	19.34	-163.43	261.10	-156.52	279.06	240.73	38.33	7.281		
5,400.00	5,363.07	5,408.62	5,380.74	21.18	19.72	-163.49	267.32	-159.85	285.36	246.29	39.07	7.304		
5,500.00	5,462.22	5,508.82	5,480.29	21.60	20.09	-163.55	273.54	-163.17	291.66	251.86	39.80	7.327		
5,600.00	5,561.37	5,590.98	5,579.84	22.01	20.40	-163.60	279.75	-166.50	297.96	257.48	40.48	7.361		
5,700.00	5,660.52	5,709.22	5,679.40	22.43	20.84	-163.65	285.97	-169.82	304.26	262.98	41.28	7.370		
5,800.00	5,759.67	5,809.42	5,778.95	22.84	21.22	-163.70	292.19	-173.15	310.56	268.54	42.02	7.391		
5,900.00	5,858.82	5,909.61	5,878.50	23.25	21.59	-163.75	298.41	-176.48	316.87	274.11	42.76	7.411		
6,000.00	5,957.97	6,009.81	5,978.05	23.67	21.97	-163.80	304.63	-179.80	323.17	279.67	43.50	7.430		
6,100.00	6,057.13	6,089.99	6,077.60	24.08	22.27	-163.85	310.85	-183.13	329.47	285.31	44.16	7.461		
6,200.00	6,156.28	6,189.79	6,177.15	24.49	22.64	-163.89	317.07	-186.45	335.77	290.87	44.90	7.479		
6,300.00	6,255.43	6,289.59	6,276.70	24.91	23.01	-163.93	323.28	-189.78	342.08	296.44	45.63	7.496		
6,400.00	6,354.58	6,389.39	6,376.26	25.32	23.39	-163.97	329.50	-193.11	348.38	302.01	46.37	7.513		
6,500.00	6,453.73	6,489.19	6,475.81	25.73	23.76	-164.01	335.72	-196.43	354.68	307.57	47.11	7.529		
6,600.00	6,552.88	6,588.99	6,575.36	26.15	24.14	-164.05	341.94	-199.76	360.98	313.14	47.85	7.545		
6,700.00	6,652.03	6,688.79	6,674.91	26.56	24.51	-164.09	348.16	-203.08	367.29	318.70	48.58	7.560		
6,800.00	6,751.18	6,788.59	6,774.46	26.98	24.88	-164.12	354.38	-206.41	373.59	324.27	49.32	7.575		
6,900.00	6,850.34	6,888.39	6,874.01	27.39	25.26	-164.15	360.60	-209.74	379.89	329.84	50.06	7.589		
7,000.00	6,949.49	6,988.20	6,973.56	27.80	25.63	-164.19	366.81	-213.06	386.20	335.40	50.79	7.603		
7,011.14	6,960.53	7,000.69	6,984.65	27.85	25.68	-164.19	367.51	-213.43	386.90	336.02	50.88	7.604		
7,100.00	7,048.80	7,088.07	7,073.19	28.21	26.01	-164.19	373.04	-216.39	391.18	339.65	51.53	7.591		
7,200.00	7,148.46	7,178.37	7,163.33	28.58	26.34	-164.13	377.68	-218.88	393.92	341.73	52.19	7.548		
7,300.00	7,248.35	7,267.51	7,252.44	28.94	26.66	-164.15	379.83	-220.02	396.04	343.24	52.80	7.501		
7,384.67	7,333.00	7,348.12	7,333.04	29.21	26.93	-179.96	380.00	-220.37	397.05	343.70	53.35	7.443		
7,400.00	7,348.33	7,363.47	7,348.38	29.26	26.99	-179.87	380.00	-221.03	397.05	343.59	53.46	7.427		
7,412.03	7,360.36	7,375.48	7,360.36	29.30	27.03	-179.75	380.01	-221.83	397.05	343.50	53.55	7.415		
7,414.67	7,363.00	7,378.11	7,362.98	29.31	27.04	-179.72	380.01	-222.04	397.05	343.48	53.57	7.412		
7,450.00	7,398.31	7,413.23	7,397.87	29.42	27.17	-89.55	380.03	-225.99	397.06	343.23	53.83	7.376		
7,500.00	7,448.02	7,462.62	7,446.39	29.58	27.35	-88.97	380.07	-235.15	397.11	342.90	54.21	7.326		
7,550.00	7,497.08	7,511.67	7,493.62	29.75	27.54	-88.40	380.12	-248.34	397.20	342.60	54.60	7.275		
7,600.00	7,545.12	7,560.41	7,539.26	29.93	27.73	-87.84	380.20	-265.40	397.33	342.33	55.00	7.224		
7,650.00	7,591.77	7,608.84	7,583.01	30.11	27.93	-87.30	380.29	-286.13	397.49	342.08	55.41	7.173		
7,700.00	7,636.69	7,656.97	7,624.61	30.30	28.14	-86.78	380.39	-310.32	397.68	341.84	55.84	7.121		
7,750.00	7,679.52	7,704.83	7,663.81	30.49	28.37	-86.28	380.51	-337.75	397.89	341.60	56.29	7.068		
7,800.00	7,719.94	7,752.44	7,700.40	30.70	28.60	-85.81	380.65	-368.19	398.11	341.35	56.76	7.013		
7,850.00	7,757.65	7,799.82	7,734.18	30.91	28.86	-85.38	380.79	-401.38	398.35	341.08	57.27	6.956		
7,900.00	7,792.35	7,846.97	7,764.97	31.14	29.14	-84.98	380.95	-437.09	398.58	340.77	57.82	6.894		
7,950.00	7,823.79	7,893.94	7,792.61	31.39	29.45	-84.61	381.11	-475.04	398.81	340.40	58.41	6.827		
8,000.00	7,851.72	7,940.73	7,816.97	31.67	29.79	-84.29	381.29	-514.98	399.03	339.96	59.07	6.755		
8,050.00	7,875.93	7,987.38	7,837.93	31.99	30.18	-84.01	381.47	-556.63	399.23	339.44	59.79	6.677		
8,100.00	7,896.23	8,033.89	7,855.38	32.35	30.59	-83.77	381.66	-599.73	399.41	338.83	60.58	6.593		
8,150.00	7,912.48	8,080.30	7,869.26	32.75	31.05	-83.57	381.85	-644.01	399.56	338.12	61.45	6.502		
8,200.00	7,924.55	8,126.63	7,879.49	33.20	31.54	-83.42	382.05	-689.17	399.68	337.29	62.39	6.406		
8,250.00	7,932.35	8,172.89	7,886.04	33.70	32.07	-83.31	382.25	-734.96	399.77	336.36	63.40	6.305		
8,300.00	7,935.81	8,219.12	7,888.87	34.24	32.62	-83.26	382.45	-781.08	399.81	335.33	64.48	6.200		
8,314.73	7,936.00	8,232.86	7,889.00	34.41	32.79	-83.25	382.51	-794.83	399.82	335.01	64.81	6.169		
8,400.00	7,936.00	8,318.13	7,889.00	35.44	33.92	-83.25	382.88	-880.10	399.82	332.75	67.07	5.961		
8,500.00	7,936.00	8,418.13	7,889.00	36.82	35.38	-83.25	383.32	-980.10	399.82	329.84	69.99	5.713		
8,600.00	7,936.00	8,518.13	7,889.00	38.34	36.98	-83.25	383.76	-1,080.09	399.82	326.64	73.18	5.464		
8,700.00	7,936.00	8,618.13	7,889.00	39.99	38.71	-83.25	384.19	-1,180.09	399.82	323.21	76.61	5.219		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.00	7,936.00	8,718.13	7,889.00	41.75	40.53	-83.25	384.63	-1,280.09	399.82	319.57	80.25	4.982		
8,900.00	7,936.00	8,818.13	7,889.00	43.62	42.45	-83.25	385.07	-1,380.09	399.82	315.74	84.08	4.755		
9,000.00	7,936.00	8,918.13	7,889.00	45.56	44.45	-83.25	385.50	-1,480.09	399.82	311.76	88.06	4.540		
9,100.00	7,936.00	9,018.13	7,889.00	47.59	46.52	-83.25	385.94	-1,580.09	399.82	307.64	92.18	4.337		
9,200.00	7,936.00	9,118.13	7,889.00	49.67	48.66	-83.25	386.38	-1,680.09	399.82	303.40	96.42	4.147		
9,300.00	7,936.00	9,218.13	7,889.00	51.82	50.84	-83.25	386.81	-1,780.09	399.83	299.06	100.77	3.968		
9,400.00	7,935.99	9,318.13	7,889.00	54.01	53.07	-83.25	387.25	-1,880.09	399.83	294.62	105.21	3.800		
9,500.00	7,935.99	9,418.13	7,889.00	56.25	55.34	-83.25	387.69	-1,980.09	399.83	290.10	109.73	3.644		
9,600.00	7,935.99	9,518.13	7,889.00	58.53	57.65	-83.25	388.12	-2,080.08	399.83	285.51	114.32	3.498		
9,700.00	7,935.99	9,618.13	7,889.00	60.84	59.99	-83.25	388.56	-2,180.08	399.83	280.86	118.97	3.361		
9,800.00	7,935.99	9,718.13	7,889.00	63.18	62.36	-83.25	389.00	-2,280.08	399.83	276.15	123.68	3.233		
9,900.00	7,935.99	9,818.13	7,889.00	65.55	64.75	-83.25	389.44	-2,380.08	399.83	271.39	128.44	3.113		
10,000.00	7,935.99	9,918.13	7,889.00	67.94	67.17	-83.25	389.87	-2,480.08	399.83	266.59	133.24	3.001		
10,100.00	7,935.99	10,018.13	7,889.00	70.35	69.60	-83.25	390.31	-2,580.08	399.83	261.75	138.08	2.896		
10,200.00	7,935.99	10,118.13	7,889.00	72.79	72.06	-83.25	390.75	-2,680.08	399.83	256.87	142.96	2.797		
10,300.00	7,935.99	10,218.13	7,889.00	75.24	74.53	-83.25	391.18	-2,780.08	399.83	251.96	147.87	2.704		
10,400.00	7,935.99	10,318.13	7,889.00	77.70	77.01	-83.25	391.62	-2,880.08	399.83	247.02	152.81	2.616		
10,500.00	7,935.99	10,418.13	7,889.00	80.19	79.51	-83.25	392.06	-2,980.08	399.83	242.05	157.78	2.534		
10,600.00	7,935.99	10,518.13	7,889.00	82.68	82.02	-83.25	392.49	-3,080.08	399.83	237.06	162.77	2.456		
10,700.00	7,935.99	10,618.13	7,889.00	85.19	84.54	-83.25	392.93	-3,180.07	399.83	232.05	167.78	2.383		
10,800.00	7,935.99	10,718.13	7,889.00	87.70	87.07	-83.25	393.37	-3,280.07	399.83	227.02	172.81	2.314		
10,900.00	7,935.99	10,818.13	7,889.00	90.23	89.61	-83.25	393.80	-3,380.07	399.83	221.97	177.86	2.248		
11,000.00	7,935.99	10,918.13	7,889.00	92.77	92.16	-83.25	394.24	-3,480.07	399.83	216.90	182.93	2.186		
11,100.00	7,935.99	11,018.13	7,889.00	95.31	94.72	-83.25	394.68	-3,580.07	399.83	211.82	188.01	2.127		
11,200.00	7,935.99	11,118.13	7,889.00	97.87	97.29	-83.25	395.11	-3,680.07	399.83	206.73	193.11	2.071		
11,300.00	7,935.99	11,218.13	7,889.00	100.43	99.86	-83.25	395.55	-3,780.07	399.83	201.62	198.22	2.017		
11,400.00	7,935.99	11,318.13	7,889.00	102.99	102.43	-83.25	395.99	-3,880.07	399.83	196.50	203.34	1.966		
11,500.00	7,935.98	11,418.13	7,889.00	105.57	105.02	-83.25	396.42	-3,980.07	399.83	191.36	208.47	1.918		
11,600.00	7,935.98	11,518.13	7,889.00	108.15	107.60	-83.25	396.86	-4,080.07	399.83	186.22	213.61	1.872		
11,700.00	7,935.98	11,618.13	7,889.00	110.73	110.20	-83.25	397.30	-4,180.06	399.84	181.07	218.77	1.828		
11,800.00	7,935.98	11,718.13	7,889.00	113.32	112.79	-83.25	397.73	-4,280.06	399.84	175.91	223.93	1.786		
11,900.00	7,935.98	11,818.13	7,889.00	115.91	115.40	-83.25	398.17	-4,380.06	399.84	170.74	229.10	1.745		
12,000.00	7,935.98	11,918.13	7,889.00	118.51	118.00	-83.25	398.61	-4,480.06	399.84	165.56	234.27	1.707		
12,100.00	7,935.98	12,018.13	7,889.00	121.11	120.61	-83.25	399.04	-4,580.06	399.84	160.38	239.46	1.670		
12,200.00	7,935.98	12,118.13	7,889.00	123.72	123.22	-83.25	399.48	-4,680.06	399.84	155.19	244.65	1.634		
12,300.00	7,935.98	12,218.13	7,889.00	126.33	125.84	-83.25	399.92	-4,780.06	399.84	149.99	249.85	1.600		
12,400.00	7,935.98	12,318.13	7,889.00	128.94	128.46	-83.25	400.36	-4,880.06	399.84	144.78	255.05	1.568		
12,500.00	7,935.98	12,418.13	7,888.99	131.56	131.08	-83.25	400.79	-4,980.06	399.84	139.57	260.26	1.536		
12,600.00	7,935.98	12,518.13	7,888.99	134.17	133.70	-83.25	401.23	-5,080.06	399.84	134.36	265.48	1.506		
12,700.00	7,935.98	12,618.13	7,888.99	136.80	136.33	-83.25	401.67	-5,180.06	399.84	129.14	270.70	1.477	Level 3	
12,800.00	7,935.98	12,718.13	7,888.99	139.42	138.96	-83.25	402.10	-5,280.05	399.84	123.91	275.93	1.449	Level 3	
12,900.00	7,935.98	12,818.13	7,888.99	142.05	141.59	-83.25	402.54	-5,380.05	399.84	118.68	281.16	1.422	Level 3	
13,000.00	7,935.98	12,918.13	7,888.99	144.68	144.23	-83.25	402.98	-5,480.05	399.84	113.45	286.39	1.396	Level 3	
13,100.00	7,935.98	13,018.13	7,888.99	147.31	146.86	-83.25	403.41	-5,580.05	399.84	108.21	291.63	1.371	Level 3	
13,200.00	7,935.98	13,118.13	7,888.99	149.94	149.50	-83.25	403.85	-5,680.05	399.84	102.97	296.87	1.347	Level 3	
13,300.00	7,935.98	13,218.13	7,888.99	152.57	152.14	-83.25	404.29	-5,780.05	399.84	97.73	302.11	1.323	Level 3	
13,400.00	7,935.98	13,318.13	7,888.99	155.21	154.78	-83.25	404.72	-5,880.05	399.84	92.48	307.36	1.301	Level 3	
13,500.00	7,935.97	13,418.13	7,888.99	157.85	157.42	-83.25	405.16	-5,980.05	399.84	87.23	312.61	1.279	Level 3	
13,600.00	7,935.97	13,518.13	7,888.99	160.49	160.07	-83.25	405.60	-6,080.05	399.84	81.97	317.87	1.258	Level 3	
13,700.00	7,935.97	13,618.13	7,888.99	163.13	162.71	-83.25	406.03	-6,180.05	399.84	76.72	323.13	1.237	Level 2	
13,800.00	7,935.97	13,718.13	7,888.99	165.78	165.36	-83.25	406.47	-6,280.04	399.84	71.46	328.39	1.218	Level 2	
13,900.00	7,935.97	13,818.13	7,888.99	168.42	168.01	-83.25	406.91	-6,380.04	399.84	66.19	333.65	1.198	Level 2	

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-5 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.00	7,935.97	13,918.13	7,888.99	171.07	170.66	-83.25	407.34	-6,480.04	399.84	60.93	338.92	1.180	Level 2	
14,100.00	7,935.97	14,018.13	7,888.99	173.72	173.31	-83.25	407.78	-6,580.04	399.85	55.66	344.19	1.162	Level 2	
14,200.00	7,935.97	14,118.13	7,888.99	176.36	175.97	-83.25	408.22	-6,680.04	399.85	50.39	349.46	1.144	Level 2	
14,300.00	7,935.97	14,218.13	7,888.99	179.02	178.62	-83.25	408.65	-6,780.04	399.85	45.12	354.73	1.127	Level 2	
14,400.00	7,935.97	14,318.13	7,888.99	181.67	181.27	-83.25	409.09	-6,880.04	399.85	39.84	360.00	1.111	Level 2	
14,500.00	7,935.97	14,418.13	7,888.99	184.32	183.93	-83.25	409.53	-6,980.04	399.85	34.57	365.28	1.095	Level 2	
14,600.00	7,935.97	14,518.13	7,888.99	186.97	186.59	-83.25	409.96	-7,080.04	399.85	29.29	370.56	1.079	Level 2	
14,700.00	7,935.97	14,618.13	7,888.99	189.63	189.24	-83.25	410.40	-7,180.04	399.85	24.01	375.84	1.064	Level 2	
14,800.00	7,935.97	14,718.13	7,888.99	192.28	191.90	-83.25	410.84	-7,280.04	399.85	18.73	381.12	1.049	Level 2	
14,900.00	7,935.97	14,818.13	7,888.99	194.94	194.56	-83.25	411.28	-7,380.03	399.85	13.44	386.41	1.035	Level 2	
15,000.00	7,935.97	14,918.13	7,888.99	197.60	197.22	-83.25	411.71	-7,480.03	399.85	8.16	391.69	1.021	Level 2	
15,100.00	7,935.97	15,018.13	7,888.99	200.26	199.88	-83.25	412.15	-7,580.03	399.85	2.87	396.98	1.007	Level 2	
15,200.00	7,935.97	15,118.13	7,888.99	202.91	202.54	-83.25	412.59	-7,680.03	399.85	-2.42	402.27	0.994	Level 1	
15,300.00	7,935.97	15,218.13	7,888.99	205.57	205.21	-83.25	413.02	-7,780.03	399.85	-7.71	407.56	0.981	Level 1	
15,400.00	7,935.97	15,318.13	7,888.99	208.24	207.87	-83.25	413.46	-7,880.03	399.85	-13.00	412.85	0.969	Level 1	
15,500.00	7,935.97	15,418.13	7,888.99	210.90	210.53	-83.25	413.90	-7,980.03	399.85	-18.29	418.14	0.956	Level 1	
15,600.00	7,935.96	15,518.13	7,888.99	213.56	213.20	-83.25	414.33	-8,080.03	399.85	-23.59	423.44	0.944	Level 1	
15,700.00	7,935.96	15,618.13	7,888.99	216.22	215.86	-83.25	414.77	-8,180.03	399.85	-28.88	428.73	0.933	Level 1	
15,800.00	7,935.96	15,718.13	7,888.99	218.89	218.53	-83.25	415.21	-8,280.03	399.85	-34.18	434.03	0.921	Level 1	
15,900.00	7,935.96	15,818.13	7,888.99	221.55	221.20	-83.25	415.64	-8,380.02	399.85	-39.48	439.33	0.910	Level 1	
16,000.00	7,935.96	15,918.13	7,888.99	224.21	223.86	-83.25	416.08	-8,480.02	399.85	-44.77	444.63	0.899	Level 1	
16,100.00	7,935.96	16,018.13	7,888.99	226.88	226.53	-83.25	416.52	-8,580.02	399.85	-50.07	449.93	0.889	Level 1	
16,200.00	7,935.96	16,118.13	7,888.99	229.55	229.20	-83.25	416.95	-8,680.02	399.85	-55.37	455.23	0.878	Level 1	
16,300.00	7,935.96	16,218.13	7,888.99	232.21	231.87	-83.25	417.39	-8,780.02	399.85	-60.68	460.53	0.868	Level 1	
16,400.00	7,935.96	16,318.13	7,888.99	234.88	234.53	-83.25	417.83	-8,880.02	399.85	-65.98	465.83	0.858	Level 1	
16,500.00	7,935.96	16,418.13	7,888.99	237.55	237.20	-83.25	418.26	-8,980.02	399.86	-71.28	471.14	0.849	Level 1	
16,600.00	7,935.96	16,518.13	7,888.99	240.21	239.87	-83.25	418.70	-9,080.02	399.86	-76.59	476.44	0.839	Level 1	
16,700.00	7,935.96	16,618.13	7,888.99	242.88	242.54	-83.25	419.14	-9,180.02	399.86	-81.89	481.75	0.830	Level 1	
16,800.00	7,935.96	16,718.13	7,888.99	245.55	245.22	-83.25	419.57	-9,280.02	399.86	-87.20	487.05	0.821	Level 1	
16,900.00	7,935.96	16,818.13	7,888.99	248.22	247.89	-83.25	420.01	-9,380.02	399.86	-92.50	492.36	0.812	Level 1	
17,000.00	7,935.96	16,918.13	7,888.99	250.89	250.56	-83.25	420.45	-9,480.01	399.86	-97.81	497.67	0.803	Level 1	
17,100.00	7,935.96	17,018.13	7,888.99	253.56	253.23	-83.25	420.88	-9,580.01	399.86	-103.12	502.98	0.795	Level 1	
17,200.00	7,935.96	17,118.13	7,888.99	256.23	255.90	-83.25	421.32	-9,680.01	399.86	-108.43	508.29	0.787	Level 1	
17,300.00	7,935.96	17,218.13	7,888.99	258.90	258.57	-83.25	421.76	-9,780.01	399.86	-113.74	513.60	0.779	Level 1	
17,400.00	7,935.96	17,318.13	7,888.99	261.58	261.25	-83.25	422.20	-9,880.01	399.86	-119.05	518.91	0.771	Level 1	
17,500.00	7,935.96	17,418.13	7,888.99	264.25	263.92	-83.25	422.63	-9,980.01	399.86	-124.36	524.22	0.763	Level 1	
17,600.00	7,935.96	17,518.13	7,888.99	266.92	266.59	-83.25	423.07	-10,080.01	399.86	-129.67	529.53	0.755	Level 1	
17,700.00	7,935.95	17,618.13	7,888.99	269.59	269.27	-83.25	423.51	-10,180.01	399.86	-134.99	534.85	0.748	Level 1	
17,800.00	7,935.95	17,718.13	7,888.99	272.26	271.94	-83.25	423.94	-10,280.01	399.86	-140.30	540.16	0.740	Level 1	
17,900.00	7,935.95	17,818.13	7,888.99	274.94	274.62	-83.25	424.38	-10,380.01	399.86	-145.61	545.48	0.733	Level 1	
17,971.65	7,935.95	17,889.78	7,888.99	276.85	276.53	-83.25	424.69	-10,451.65	399.86	-149.42	549.28	0.728	Level 1	
17,997.91	7,936.00	17,914.91	7,889.00	277.56	277.21	-83.25	424.76	-10,476.78	399.83	-150.78	550.61	0.726	Level 1, ES, SF	

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-33.75	33.75					
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-33.75	33.75	33.48	0.27	125.532		
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-33.75	33.75	32.76	0.99	34.236		
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-33.75	33.75	32.05	1.70	19.821		
400.00	400.00	400.00	400.00	1.21	1.21	-90.00	0.00	-33.75	33.75	31.33	2.42	13.948		
500.00	500.00	500.00	500.00	1.57	1.57	-90.00	0.00	-33.75	33.75	30.61	3.14	10.760		
600.00	600.00	600.00	600.00	1.93	1.93	-90.00	0.00	-33.75	33.75	29.90	3.85	8.758		
700.00	700.00	700.00	700.00	2.29	2.29	-90.00	0.00	-33.75	33.75	29.18	4.57	7.384		
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-33.75	33.75	28.46	5.29	6.383		
900.00	899.98	900.02	899.98	3.00	3.00	-77.08	0.00	-33.75	33.32	27.31	6.00	5.549		
1,000.00	999.84	1,000.16	999.84	3.36	3.36	-86.10	0.00	-33.75	32.55	25.83	6.72	4.843		
1,029.63	1,029.38	1,029.38	1,029.38	3.47	3.47	-90.00	0.00	-33.75	32.47	25.54	6.93	4.684 CC, ES		
1,100.00	1,099.45	1,100.55	1,099.45	3.72	3.72	-101.25	0.00	-33.75	33.12	25.67	7.44	4.450		
1,173.53	1,172.47	1,172.47	1,172.47	3.99	3.98	-114.78	0.00	-33.75	35.82	27.85	7.97	4.493		
1,200.00	1,198.72	1,198.72	1,198.72	4.09	4.07	-119.54	0.00	-33.75	37.40	29.24	8.16	4.581		
1,300.00	1,297.87	1,303.01	1,296.97	4.47	4.44	-132.17	-0.15	-35.38	46.26	37.36	8.90	5.199		
1,400.00	1,397.02	1,403.83	1,396.10	4.85	4.78	-139.22	-0.44	-38.58	57.40	47.79	9.61	5.973		
1,500.00	1,496.17	1,504.66	1,495.22	5.24	5.13	-143.94	-0.72	-41.78	69.12	58.79	10.32	6.694		
1,600.00	1,595.32	1,605.48	1,594.35	5.63	5.48	-147.27	-1.01	-44.98	81.16	70.12	11.04	7.351		
1,700.00	1,694.47	1,706.30	1,693.47	6.03	5.83	-149.74	-1.30	-48.18	93.41	81.65	11.76	7.943		
1,800.00	1,793.62	1,807.13	1,792.60	6.43	6.19	-151.63	-1.59	-51.39	105.79	93.31	12.48	8.476		
1,900.00	1,892.78	1,907.95	1,891.72	6.83	6.54	-153.13	-1.88	-54.59	118.26	105.06	13.20	8.957		
2,000.00	1,991.93	2,008.77	1,990.85	7.23	6.90	-154.34	-2.17	-57.79	130.80	116.87	13.93	9.391		
2,100.00	2,091.08	2,109.59	2,089.97	7.63	7.26	-155.34	-2.45	-60.99	143.38	128.73	14.65	9.785		
2,200.00	2,190.23	2,189.58	2,189.10	8.04	7.54	-156.18	-2.74	-64.19	156.00	140.69	15.30	10.193		
2,300.00	2,289.38	2,288.76	2,288.22	8.44	7.90	-156.89	-3.03	-67.39	168.64	152.62	16.03	10.523		
2,400.00	2,388.53	2,387.94	2,387.35	8.85	8.25	-157.50	-3.32	-70.59	181.31	164.56	16.75	10.826		
2,500.00	2,487.68	2,487.11	2,486.47	9.25	8.60	-158.03	-3.61	-73.79	193.99	176.52	17.47	11.104		
2,600.00	2,586.83	2,586.29	2,585.60	9.66	8.96	-158.50	-3.90	-76.99	206.69	188.50	18.19	11.361		
2,700.00	2,685.99	2,685.47	2,684.72	10.07	9.31	-158.91	-4.19	-80.19	219.41	200.49	18.92	11.598		
2,800.00	2,785.14	2,784.65	2,783.85	10.48	9.67	-159.28	-4.47	-83.39	232.13	212.49	19.64	11.818		
2,900.00	2,884.29	2,883.82	2,882.97	10.89	10.02	-159.61	-4.76	-86.59	244.86	224.49	20.37	12.023		
3,000.00	2,983.44	2,983.00	2,982.10	11.30	10.38	-159.91	-5.05	-89.79	257.60	236.50	21.09	12.213		
3,100.00	3,082.59	3,082.18	3,081.22	11.71	10.74	-160.18	-5.34	-92.99	270.34	248.52	21.82	12.391		
3,200.00	3,181.74	3,181.35	3,180.35	12.12	11.09	-160.42	-5.63	-96.20	283.09	260.54	22.54	12.558		
3,300.00	3,280.89	3,280.53	3,279.47	12.53	11.45	-160.65	-5.92	-99.40	295.84	272.57	23.27	12.714		
3,400.00	3,380.04	3,379.71	3,378.60	12.94	11.81	-160.85	-6.20	-102.60	308.60	284.60	24.00	12.861		
3,500.00	3,479.20	3,478.89	3,477.72	13.35	12.16	-161.04	-6.49	-105.80	321.36	296.64	24.72	12.999		
3,600.00	3,578.35	3,578.06	3,576.85	13.76	12.52	-161.21	-6.78	-109.00	334.12	308.67	25.45	13.129		
3,700.00	3,677.50	3,677.24	3,675.97	14.17	12.88	-161.38	-7.07	-112.20	346.89	320.71	26.18	13.252		
3,800.00	3,776.65	3,776.42	3,775.10	14.58	13.24	-161.53	-7.36	-115.40	359.66	332.76	26.90	13.369		
3,900.00	3,875.80	3,875.59	3,874.22	14.99	13.59	-161.67	-7.65	-118.60	372.43	344.80	27.63	13.479		
4,000.00	3,974.95	3,974.77	3,973.35	15.41	13.95	-161.80	-7.94	-121.80	385.21	356.85	28.36	13.583		
4,100.00	4,074.10	4,073.95	4,072.47	15.82	14.31	-161.92	-8.22	-125.00	397.98	368.90	29.09	13.683		
4,200.00	4,173.25	4,173.12	4,171.60	16.23	14.67	-162.03	-8.51	-128.20	410.76	380.94	29.81	13.777		
4,300.00	4,272.40	4,272.30	4,270.72	16.64	15.03	-162.14	-8.80	-131.40	423.54	393.00	30.54	13.867		
4,400.00	4,371.56	4,371.48	4,369.85	17.06	15.38	-162.24	-9.09	-134.60	436.32	405.05	31.27	13.953		
4,500.00	4,470.71	4,470.66	4,468.97	17.47	15.74	-162.34	-9.38	-137.80	449.10	417.10	32.00	14.034		
4,600.00	4,569.86	4,569.83	4,568.10	17.88	16.10	-162.43	-9.67	-141.01	461.88	429.15	32.73	14.113		
4,700.00	4,669.01	4,669.01	4,667.22	18.29	16.46	-162.51	-9.95	-144.21	474.67	441.21	33.46	14.187		
4,800.00	4,768.16	4,768.19	4,766.35	18.71	16.82	-162.59	-10.24	-147.41	487.45	453.27	34.19	14.259		
4,900.00	4,867.31	4,867.36	4,865.47	19.12	17.18	-162.67	-10.53	-150.61	500.24	465.32	34.92	14.327		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,966.54	4,964.60	19.53	17.53	-162.74	-10.82	-153.81	513.02	477.38	35.64	14.393		
5,100.00	5,065.61	5,065.72	5,063.72	19.95	17.89	-162.81	-11.11	-157.01	525.81	489.44	36.37	14.456		
5,200.00	5,164.77	5,164.90	5,162.85	20.36	18.25	-162.88	-11.40	-160.21	538.60	501.50	37.10	14.517		
5,300.00	5,263.92	5,264.07	5,261.97	20.77	18.61	-162.94	-11.68	-163.41	551.39	513.56	37.83	14.575		
5,400.00	5,363.07	5,363.25	5,361.10	21.18	18.97	-163.00	-11.97	-166.61	564.18	525.62	38.56	14.631		
5,500.00	5,462.22	5,462.43	5,460.22	21.60	19.33	-163.06	-12.26	-169.81	576.97	537.68	39.29	14.685		
5,600.00	5,561.37	5,561.60	5,559.35	22.01	19.69	-163.12	-12.55	-173.01	589.76	549.74	40.02	14.737		
5,700.00	5,660.52	5,660.78	5,658.47	22.43	20.05	-163.17	-12.84	-176.21	602.55	561.80	40.75	14.787		
5,800.00	5,759.67	5,759.96	5,757.60	22.84	20.41	-163.22	-13.13	-179.41	615.34	573.86	41.48	14.835		
5,900.00	5,858.82	5,859.14	5,856.72	23.25	20.76	-163.27	-13.42	-182.61	628.13	585.92	42.21	14.881		
6,000.00	5,957.97	5,958.31	5,955.85	23.67	21.12	-163.31	-13.70	-185.82	640.92	597.99	42.94	14.926		
6,100.00	6,057.13	6,057.49	6,054.97	24.08	21.48	-163.36	-13.99	-189.02	653.72	610.05	43.67	14.970		
6,200.00	6,156.28	6,156.67	6,154.10	24.49	21.84	-163.40	-14.28	-192.22	666.51	622.11	44.40	15.012		
6,300.00	6,255.43	6,255.84	6,253.22	24.91	22.20	-163.44	-14.57	-195.42	679.30	634.18	45.13	15.053		
6,400.00	6,354.58	6,355.02	6,352.35	25.32	22.56	-163.48	-14.86	-198.62	692.10	646.24	45.86	15.092		
6,500.00	6,453.73	6,454.20	6,451.47	25.73	22.92	-163.52	-15.15	-201.82	704.89	658.30	46.59	15.130		
6,600.00	6,552.88	6,553.37	6,550.60	26.15	23.28	-163.56	-15.43	-205.02	717.69	670.37	47.32	15.167		
6,700.00	6,652.03	6,652.55	6,649.72	26.56	23.64	-163.59	-15.72	-208.22	730.48	682.43	48.05	15.203		
6,800.00	6,751.18	6,751.73	6,748.85	26.98	24.00	-163.63	-16.01	-211.42	743.28	694.50	48.78	15.238		
6,900.00	6,850.34	6,850.91	6,847.97	27.39	24.36	-163.66	-16.30	-214.62	756.07	706.56	49.51	15.271		
7,000.00	6,949.49	6,950.08	6,947.10	27.80	24.72	-163.69	-16.59	-217.82	768.87	718.63	50.24	15.304		
7,011.14	6,960.53	6,961.13	6,958.14	27.85	24.76	-163.70	-16.62	-218.18	770.29	719.97	50.32	15.307		
7,100.00	7,048.80	7,049.42	7,046.38	28.21	25.08	-163.75	-16.88	-221.03	780.35	729.38	50.97	15.310		
7,200.00	7,148.46	7,151.43	7,148.37	28.58	25.44	-163.83	-17.05	-222.94	788.39	736.69	51.70	15.249		
7,300.00	7,248.35	7,251.15	7,247.94	28.94	25.80	-163.67	-17.03	-226.75	792.91	740.49	52.42	15.127		
7,384.67	7,333.00	7,332.86	7,328.16	29.21	26.12	-178.43	-16.97	-241.90	794.33	741.28	53.05	14.974		
7,400.00	7,348.33	7,347.11	7,341.90	29.26	26.17	-178.15	-16.95	-245.70	794.44	741.28	53.16	14.944		
7,414.67	7,363.00	7,360.56	7,354.77	29.31	26.23	-177.87	-16.93	-249.61	794.57	741.31	53.27	14.917		
7,450.00	7,398.31	7,392.46	7,384.90	29.42	26.36	-87.39	-16.89	-260.07	795.01	741.48	53.52	14.853		
7,500.00	7,448.02	7,436.80	7,425.72	29.58	26.56	-86.38	-16.81	-277.36	795.83	741.95	53.88	14.769		
7,550.00	7,497.08	7,480.28	7,464.33	29.75	26.75	-85.40	-16.73	-297.32	796.88	742.64	54.25	14.690		
7,600.00	7,545.12	7,522.97	7,500.66	29.93	26.96	-84.45	-16.63	-319.72	798.12	743.51	54.61	14.616		
7,650.00	7,591.77	7,564.96	7,534.68	30.11	27.17	-83.55	-16.52	-344.33	799.51	744.54	54.97	14.544		
7,700.00	7,636.69	7,606.33	7,566.33	30.30	27.39	-82.68	-16.40	-370.95	801.00	745.67	55.34	14.475		
7,750.00	7,679.52	7,647.15	7,595.60	30.49	27.63	-81.87	-16.28	-399.38	802.57	746.86	55.71	14.405		
7,800.00	7,719.94	7,687.46	7,622.46	30.70	27.88	-81.11	-16.15	-429.43	804.17	748.06	56.11	14.332		
7,850.00	7,757.65	7,727.34	7,646.88	30.91	28.16	-80.41	-16.01	-460.95	805.76	749.23	56.53	14.254		
7,900.00	7,792.35	7,766.83	7,668.85	31.14	28.45	-79.77	-15.87	-493.76	807.30	750.33	56.98	14.169		
7,950.00	7,823.79	7,805.99	7,688.34	31.39	28.76	-79.19	-15.72	-527.71	808.76	751.30	57.46	14.074		
8,000.00	7,851.72	7,844.87	7,705.36	31.67	29.10	-78.69	-15.57	-562.65	810.11	752.11	58.00	13.967		
8,050.00	7,875.93	7,883.50	7,719.89	31.99	29.46	-78.25	-15.41	-598.44	811.32	752.71	58.61	13.843		
8,100.00	7,896.23	7,921.92	7,731.91	32.35	29.85	-77.88	-15.25	-634.93	812.36	753.08	59.27	13.705		
8,150.00	7,912.48	7,960.19	7,741.43	32.75	30.26	-77.59	-15.09	-671.99	813.20	753.20	60.01	13.551		
8,200.00	7,924.55	8,000.00	7,748.69	33.20	30.71	-77.36	-14.92	-711.12	813.85	753.00	60.85	13.375		
8,250.00	7,932.35	8,036.40	7,752.93	33.70	31.14	-77.23	-14.76	-747.26	814.27	752.56	61.71	13.196		
8,300.00	7,935.81	8,074.41	7,754.90	34.24	31.61	-77.16	-14.60	-785.21	814.46	751.80	62.66	12.998		
8,314.73	7,936.00	8,085.76	7,755.00	34.41	31.76	-77.16	-14.55	-796.56	814.48	751.52	62.95	12.938		
8,400.00	7,936.00	8,171.02	7,755.00	35.44	32.92	-77.16	-14.17	-881.83	814.48	749.29	65.18	12.495		
8,500.00	7,936.00	8,271.02	7,755.00	36.82	34.42	-77.16	-13.74	-981.83	814.48	746.41	68.07	11.966		
8,600.00	7,936.00	8,371.02	7,755.00	38.34	36.05	-77.16	-13.30	-1,081.82	814.48	743.26	71.22	11.436		
8,700.00	7,936.00	8,471.02	7,755.00	39.99	37.81	-77.16	-12.87	-1,181.82	814.48	739.87	74.61	10.917		
8,800.00	7,936.00	8,571.02	7,755.00	41.75	39.67	-77.16	-12.43	-1,281.82	814.48	736.27	78.21	10.415		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Sec 4-T4S-R65W - JAMASO 4-6S 5-6-6 - ORIGINAL WELLBORE - PROPOSAL 1		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD OWSG													Offset Well Error: 0.00 usft			
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					
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)					
8,900.00	7,936.00	8,671.02	7,755.00	43.62	41.62	-77.16	-11.99	-1,381.82	814.48	732.50	81.98	9.935				
9,000.00	7,936.00	8,771.02	7,755.00	45.56	43.65	-77.16	-11.56	-1,481.82	814.48	728.57	85.91	9.480				
9,100.00	7,936.00	8,871.02	7,755.00	47.59	45.75	-77.16	-11.12	-1,581.82	814.48	724.50	89.98	9.052				
9,200.00	7,936.00	8,971.02	7,755.00	49.67	47.91	-77.16	-10.68	-1,681.82	814.48	720.32	94.16	8.650				
9,300.00	7,936.00	9,071.02	7,755.00	51.82	50.11	-77.16	-10.25	-1,781.82	814.48	716.03	98.45	8.273				
9,400.00	7,935.99	9,171.02	7,755.00	54.01	52.37	-77.16	-9.81	-1,881.82	814.48	711.66	102.83	7.921				
9,500.00	7,935.99	9,271.02	7,755.00	56.25	54.66	-77.16	-9.37	-1,981.82	814.49	707.20	107.28	7.592				
9,600.00	7,935.99	9,371.02	7,755.00	58.53	56.99	-77.16	-8.94	-2,081.82	814.49	702.68	111.81	7.285				
9,700.00	7,935.99	9,471.02	7,755.00	60.84	59.35	-77.16	-8.50	-2,181.81	814.49	698.09	116.39	6.998				
9,800.00	7,935.99	9,571.02	7,755.00	63.18	61.73	-77.16	-8.07	-2,281.81	814.49	693.45	121.04	6.729				
9,900.00	7,935.99	9,671.02	7,755.00	65.55	64.14	-77.16	-7.63	-2,381.81	814.49	688.76	125.72	6.478				
10,000.00	7,935.99	9,771.02	7,755.00	67.94	66.58	-77.16	-7.19	-2,481.81	814.49	684.03	130.46	6.243				
10,100.00	7,935.99	9,871.02	7,755.00	70.35	69.03	-77.16	-6.76	-2,581.81	814.49	679.26	135.23	6.023				
10,200.00	7,935.99	9,971.02	7,755.00	72.79	71.49	-77.16	-6.32	-2,681.81	814.49	674.46	140.03	5.816				
10,300.00	7,935.99	10,071.02	7,755.00	75.24	73.98	-77.16	-5.88	-2,781.81	814.49	669.62	144.87	5.622				
10,400.00	7,935.99	10,171.02	7,755.00	77.70	76.47	-77.16	-5.45	-2,881.81	814.49	664.76	149.73	5.440				
10,500.00	7,935.99	10,271.02	7,755.00	80.19	78.98	-77.16	-5.01	-2,981.81	814.49	659.87	154.62	5.268				
10,600.00	7,935.99	10,371.02	7,755.00	82.68	81.51	-77.16	-4.57	-3,081.81	814.49	654.96	159.54	5.105				
10,700.00	7,935.99	10,471.02	7,755.00	85.19	84.04	-77.16	-4.14	-3,181.80	814.50	650.03	164.47	4.952				
10,800.00	7,935.99	10,571.02	7,755.00	87.70	86.58	-77.16	-3.70	-3,281.80	814.50	645.07	169.42	4.807				
10,900.00	7,935.99	10,671.02	7,755.00	90.23	89.13	-77.16	-3.27	-3,381.80	814.50	640.10	174.39	4.670				
11,000.00	7,935.99	10,771.02	7,755.00	92.77	91.69	-77.16	-2.83	-3,481.80	814.50	635.12	179.38	4.541				
11,100.00	7,935.99	10,871.02	7,755.00	95.31	94.25	-77.16	-2.39	-3,581.80	814.50	630.11	184.38	4.417				
11,200.00	7,935.99	10,971.02	7,755.00	97.87	96.82	-77.16	-1.96	-3,681.80	814.50	625.10	189.40	4.300				
11,300.00	7,935.99	11,071.02	7,755.00	100.43	99.40	-77.16	-1.52	-3,781.80	814.50	620.07	194.43	4.189				
11,400.00	7,935.99	11,171.02	7,755.00	102.99	101.99	-77.16	-1.08	-3,881.80	814.50	615.03	199.47	4.083				
11,500.00	7,935.98	11,271.02	7,755.00	105.57	104.58	-77.16	-0.65	-3,981.80	814.50	609.98	204.52	3.983				
11,600.00	7,935.98	11,371.02	7,755.00	108.15	107.17	-77.16	-0.21	-4,081.80	814.50	604.92	209.58	3.886				
11,700.00	7,935.98	11,471.02	7,755.00	110.73	109.77	-77.16	0.23	-4,181.80	814.50	599.85	214.65	3.795				
11,800.00	7,935.98	11,571.02	7,755.00	113.32	112.37	-77.16	0.66	-4,281.79	814.50	594.78	219.73	3.707				
11,900.00	7,935.98	11,671.02	7,755.00	115.91	114.98	-77.16	1.10	-4,381.79	814.50	589.69	224.82	3.623				
12,000.00	7,935.98	11,771.02	7,755.00	118.51	117.59	-77.16	1.53	-4,481.79	814.51	584.60	229.91	3.543				
12,100.00	7,935.98	11,871.02	7,755.00	121.11	120.21	-77.16	1.97	-4,581.79	814.51	579.50	235.01	3.466				
12,200.00	7,935.98	11,971.02	7,755.00	123.72	122.82	-77.16	2.41	-4,681.79	814.51	574.39	240.12	3.392				
12,300.00	7,935.98	12,071.02	7,755.00	126.33	125.44	-77.16	2.84	-4,781.79	814.51	569.28	245.23	3.321				
12,400.00	7,935.98	12,171.02	7,755.00	128.94	128.07	-77.16	3.28	-4,881.79	814.51	564.16	250.35	3.253				
12,500.00	7,935.98	12,271.02	7,755.00	131.56	130.69	-77.16	3.72	-4,981.79	814.51	559.03	255.48	3.188				
12,600.00	7,935.98	12,371.02	7,755.00	134.17	133.32	-77.16	4.15	-5,081.79	814.51	553.90	260.61	3.125				
12,700.00	7,935.98	12,471.02	7,755.00	136.80	135.95	-77.16	4.59	-5,181.79	814.51	548.77	265.74	3.065				
12,800.00	7,935.98	12,571.02	7,755.00	139.42	138.59	-77.16	5.02	-5,281.78	814.51	543.63	270.88	3.007				
12,900.00	7,935.98	12,671.02	7,755.00	142.05	141.22	-77.16	5.46	-5,381.78	814.51	538.48	276.03	2.951				
13,000.00	7,935.98	12,771.02	7,755.00	144.68	143.86	-77.16	5.90	-5,481.78	814.51	533.34	281.18	2.897				
13,100.00	7,935.98	12,871.02	7,755.00	147.31	146.50	-77.16	6.33	-5,581.78	814.51	528.19	286.33	2.845				
13,200.00	7,935.98	12,971.02	7,754.99	149.94	149.14	-77.16	6.77	-5,681.78	814.52	523.03	291.48	2.794				
13,300.00	7,935.98	13,071.02	7,754.99	152.57	151.78	-77.16	7.21	-5,781.78	814.52	517.87	296.64	2.746				
13,400.00	7,935.98	13,171.02	7,754.99	155.21	154.43	-77.16	7.64	-5,881.78	814.52	512.71	301.81	2.699				
13,500.00	7,935.97	13,271.02	7,754.99	157.85	157.08	-77.16	8.08	-5,981.78	814.52	507.55	306.97	2.653				
13,600.00	7,935.97	13,371.02	7,754.99	160.49	159.72	-77.16	8.52	-6,081.78	814.52	502.38	312.14	2.609				
13,700.00	7,935.97	13,471.02	7,754.99	163.13	162.37	-77.16	8.95	-6,181.78	814.52	497.21	317.31	2.567				
13,800.00	7,935.97	13,571.02	7,754.99	165.78	165.02	-77.16	9.39	-6,281.78	814.52	492.03	322.49	2.526				
13,900.00	7,935.97	13,671.02	7,754.99	168.42	167.67	-77.16	9.82	-6,381.77	814.52	486.86	327.66	2.486				
14,000.00	7,935.97	13,771.02	7,754.99	171.07	170.33	-77.16	10.26	-6,481.77	814.52	481.68	332.84	2.447				

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	7,935.97	13,871.02	7,754.99	173.72	172.98	-77.16	10.70	-6,581.77	814.52	476.50	338.02	2.410		
14,200.00	7,935.97	13,971.02	7,754.99	176.36	175.64	-77.16	11.13	-6,681.77	814.52	471.32	343.21	2.373		
14,300.00	7,935.97	14,071.02	7,754.99	179.02	178.29	-77.16	11.57	-6,781.77	814.52	466.13	348.39	2.338		
14,400.00	7,935.97	14,171.02	7,754.99	181.67	180.95	-77.16	12.01	-6,881.77	814.53	460.95	353.58	2.304		
14,500.00	7,935.97	14,271.02	7,754.99	184.32	183.61	-77.16	12.44	-6,981.77	814.53	455.76	358.77	2.270		
14,600.00	7,935.97	14,371.02	7,754.99	186.97	186.27	-77.16	12.88	-7,081.77	814.53	450.57	363.96	2.238		
14,700.00	7,935.97	14,471.02	7,754.99	189.63	188.93	-77.16	13.32	-7,181.77	814.53	445.37	369.15	2.206		
14,800.00	7,935.97	14,571.02	7,754.99	192.28	191.59	-77.16	13.75	-7,281.77	814.53	440.18	374.35	2.176		
14,900.00	7,935.97	14,671.02	7,754.99	194.94	194.25	-77.16	14.19	-7,381.76	814.53	434.98	379.55	2.146		
15,000.00	7,935.97	14,771.02	7,754.99	197.60	196.91	-77.16	14.62	-7,481.76	814.53	429.79	384.74	2.117		
15,100.00	7,935.97	14,871.02	7,754.99	200.26	199.57	-77.16	15.06	-7,581.76	814.53	424.59	389.94	2.089		
15,200.00	7,935.97	14,971.02	7,754.99	202.91	202.24	-77.16	15.50	-7,681.76	814.53	419.39	395.14	2.061		
15,300.00	7,935.97	15,071.02	7,754.99	205.57	204.90	-77.16	15.93	-7,781.76	814.53	414.19	400.35	2.035		
15,400.00	7,935.97	15,171.02	7,754.99	208.24	207.57	-77.16	16.37	-7,881.76	814.53	408.98	405.55	2.008		
15,500.00	7,935.97	15,271.02	7,754.99	210.90	210.23	-77.16	16.81	-7,981.76	814.53	403.78	410.76	1.983		
15,600.00	7,935.96	15,371.02	7,754.99	213.56	212.90	-77.16	17.24	-8,081.76	814.53	398.57	415.96	1.958		
15,700.00	7,935.96	15,471.02	7,754.99	216.22	215.56	-77.16	17.68	-8,181.76	814.54	393.37	421.17	1.934		
15,800.00	7,935.96	15,571.02	7,754.99	218.89	218.23	-77.16	18.12	-8,281.76	814.54	388.16	426.38	1.910		
15,900.00	7,935.96	15,671.02	7,754.99	221.55	220.90	-77.16	18.55	-8,381.76	814.54	382.95	431.59	1.887		
16,000.00	7,935.96	15,771.02	7,754.99	224.21	223.57	-77.16	18.99	-8,481.75	814.54	377.74	436.80	1.865		
16,100.00	7,935.96	15,871.02	7,754.99	226.88	226.24	-77.16	19.42	-8,581.75	814.54	372.53	442.01	1.843		
16,200.00	7,935.96	15,971.02	7,754.99	229.55	228.91	-77.16	19.86	-8,681.75	814.54	367.32	447.22	1.821		
16,300.00	7,935.96	16,071.02	7,754.99	232.21	231.58	-77.16	20.30	-8,781.75	814.54	362.10	452.44	1.800		
16,400.00	7,935.96	16,171.02	7,754.99	234.88	234.25	-77.16	20.73	-8,881.75	814.54	356.89	457.65	1.780		
16,500.00	7,935.96	16,271.02	7,754.99	237.55	236.92	-77.16	21.17	-8,981.75	814.54	351.67	462.87	1.760		
16,600.00	7,935.96	16,371.02	7,754.99	240.21	239.59	-77.16	21.61	-9,081.75	814.54	346.46	468.08	1.740		
16,700.00	7,935.96	16,471.02	7,754.99	242.88	242.26	-77.16	22.04	-9,181.75	814.54	341.24	473.30	1.721		
16,800.00	7,935.96	16,571.02	7,754.99	245.55	244.93	-77.16	22.48	-9,281.75	814.54	336.02	478.52	1.702		
16,900.00	7,935.96	16,671.02	7,754.99	248.22	247.60	-77.16	22.92	-9,381.75	814.55	330.81	483.74	1.684		
17,000.00	7,935.96	16,771.02	7,754.99	250.89	250.28	-77.16	23.35	-9,481.75	814.55	325.59	488.96	1.666		
17,100.00	7,935.96	16,871.02	7,754.99	253.56	252.95	-77.16	23.79	-9,581.74	814.55	320.37	494.18	1.648		
17,200.00	7,935.96	16,971.02	7,754.99	256.23	255.62	-77.16	24.22	-9,681.74	814.55	315.15	499.40	1.631		
17,300.00	7,935.96	17,071.02	7,754.99	258.90	258.30	-77.16	24.66	-9,781.74	814.55	309.93	504.62	1.614		
17,400.00	7,935.96	17,171.02	7,754.99	261.58	260.97	-77.16	25.10	-9,881.74	814.55	304.70	509.84	1.598		
17,500.00	7,935.96	17,271.02	7,754.99	264.25	263.65	-77.16	25.53	-9,981.74	814.55	299.48	515.07	1.581		
17,600.00	7,935.96	17,371.02	7,754.99	266.92	266.32	-77.16	25.97	-10,081.74	814.55	294.26	520.29	1.566		
17,700.00	7,935.95	17,471.02	7,754.99	269.59	269.00	-77.16	26.41	-10,181.74	814.55	289.04	525.52	1.550		
17,800.00	7,935.95	17,571.02	7,754.99	272.26	271.67	-77.16	26.84	-10,281.74	814.55	283.81	530.74	1.535		
17,900.00	7,935.95	17,671.02	7,754.99	274.94	274.35	-77.16	27.28	-10,381.74	814.55	278.59	535.97	1.520		
17,997.91	7,936.00	17,769.01	7,755.00	277.56	276.97	-77.16	27.71	-10,479.72	814.48	273.40	541.08	1.505 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	73.12	73.12					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	73.12	73.12	72.86	0.27	271.987		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	73.12	73.12	72.14	0.99	74.178		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	73.12	73.12	71.42	1.70	42.945		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	73.12	73.12	70.71	2.42	30.221		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	73.12	73.12	69.99	3.14	23.313		
600.00	600.00	600.00	600.00	1.93	1.93	90.00	0.00	73.12	73.12	69.27	3.85	18.976		
700.00	700.00	700.00	700.00	2.29	2.29	90.00	0.00	73.12	73.12	68.55	4.57	15.999		
800.00	800.00	800.00	800.00	2.64	2.64	90.00	0.00	73.12	73.12	67.84	5.29	13.830 CC		
900.00	899.98	900.02	899.98	3.00	3.00	107.11	0.00	73.12	73.62	67.62	6.00	12.263 ES		
1,000.00	999.84	1,000.16	999.84	3.36	3.36	110.88	0.00	73.12	75.33	68.61	6.72	11.209		
1,100.00	1,099.45	1,099.45	1,099.45	3.72	3.72	116.72	0.00	73.12	78.86	71.42	7.44	10.604		
1,173.53	1,172.47	1,173.20	1,173.20	3.99	3.97	122.60	-0.74	72.56	82.79	74.83	7.96	10.404		
1,200.00	1,198.72	1,199.63	1,199.61	4.09	4.06	125.07	-1.38	72.08	84.46	76.31	8.14	10.370		
1,300.00	1,297.87	1,298.90	1,298.74	4.47	4.39	134.80	-5.50	68.97	91.72	82.88	8.84	10.377		
1,400.00	1,397.02	1,402.76	1,396.76	4.85	4.74	144.38	-11.74	64.26	101.27	91.72	9.55	10.601		
1,500.00	1,496.17	1,504.58	1,494.62	5.24	5.09	152.27	-18.14	59.43	113.20	102.94	10.26	11.030		
1,600.00	1,595.32	1,606.41	1,592.47	5.63	5.45	158.58	-24.54	54.60	126.86	115.89	10.98	11.558		
1,700.00	1,694.47	1,708.23	1,690.32	6.03	5.81	163.64	-30.94	49.77	141.76	130.07	11.69	12.126		
1,800.00	1,793.62	1,789.95	1,788.17	6.43	6.11	167.72	-37.33	44.94	157.54	145.21	12.34	12.770		
1,900.00	1,892.78	1,888.13	1,886.02	6.83	6.46	171.05	-43.73	40.11	173.97	160.93	13.04	13.337		
2,000.00	1,991.93	1,986.31	1,983.87	7.23	6.82	173.81	-50.13	35.28	190.87	177.12	13.75	13.878		
2,100.00	2,091.08	2,084.49	2,081.72	7.63	7.18	176.11	-56.53	30.45	208.14	193.67	14.46	14.389		
2,200.00	2,190.23	2,182.67	2,179.58	8.04	7.54	178.06	-62.93	25.62	225.68	210.50	15.18	14.869		
2,300.00	2,289.38	2,280.85	2,277.43	8.44	7.90	179.73	-69.33	20.79	243.44	227.55	15.89	15.317		
2,400.00	2,388.53	2,379.03	2,375.28	8.85	8.27	-178.82	-75.72	15.96	261.38	244.77	16.61	15.736		
2,500.00	2,487.68	2,477.21	2,473.13	9.25	8.64	-177.57	-82.12	11.14	279.45	262.12	17.33	16.127		
2,600.00	2,586.83	2,575.39	2,570.98	9.66	9.00	-176.46	-88.52	6.31	297.64	279.60	18.05	16.492		
2,700.00	2,685.99	2,673.57	2,668.83	10.07	9.37	-175.49	-94.92	1.48	315.93	297.16	18.77	16.834		
2,800.00	2,785.14	2,771.74	2,766.68	10.48	9.74	-174.61	-101.32	-3.35	334.29	314.80	19.49	17.153		
2,900.00	2,884.29	2,869.92	2,864.53	10.89	10.11	-173.83	-107.72	-8.18	352.72	332.51	20.21	17.452		
3,000.00	2,983.44	2,968.10	2,962.39	11.30	10.48	-173.13	-114.12	-13.01	371.21	350.28	20.93	17.732		
3,100.00	3,082.59	3,066.28	3,060.24	11.71	10.85	-172.50	-120.51	-17.84	389.75	368.09	21.66	17.996		
3,200.00	3,181.74	3,164.46	3,158.09	12.12	11.22	-171.92	-126.91	-22.67	408.33	385.95	22.38	18.243		
3,300.00	3,280.89	3,262.64	3,255.94	12.53	11.60	-171.39	-133.31	-27.50	426.94	403.84	23.11	18.477		
3,400.00	3,380.04	3,360.82	3,353.79	12.94	11.97	-170.91	-139.71	-32.33	445.59	421.76	23.83	18.697		
3,500.00	3,479.20	3,459.00	3,451.64	13.35	12.34	-170.46	-146.11	-37.16	464.27	439.71	24.56	18.905		
3,600.00	3,578.35	3,557.18	3,549.49	13.76	12.72	-170.05	-152.51	-41.99	482.97	457.68	25.28	19.101		
3,700.00	3,677.50	3,655.36	3,647.35	14.17	13.09	-169.67	-158.90	-46.82	501.69	475.68	26.01	19.287		
3,800.00	3,776.65	3,753.54	3,745.20	14.58	13.46	-169.32	-165.30	-51.65	520.44	493.70	26.74	19.464		
3,900.00	3,875.80	3,851.71	3,843.05	14.99	13.84	-168.99	-171.70	-56.48	539.20	511.73	27.47	19.631		
4,000.00	3,974.95	3,949.89	3,940.90	15.41	14.21	-168.69	-178.10	-61.31	557.97	529.78	28.19	19.790		
4,100.00	4,074.10	4,048.07	4,038.75	15.82	14.59	-168.40	-184.50	-66.14	576.76	547.84	28.92	19.942		
4,200.00	4,173.25	4,146.25	4,136.60	16.23	14.96	-168.13	-190.90	-70.97	595.57	565.92	29.65	20.086		
4,300.00	4,272.40	4,244.43	4,234.45	16.64	15.34	-167.88	-197.29	-75.80	614.38	584.01	30.38	20.224		
4,400.00	4,371.56	4,342.61	4,332.30	17.06	15.71	-167.64	-203.69	-80.63	633.21	602.10	31.11	20.355		
4,500.00	4,470.71	4,440.79	4,430.16	17.47	16.09	-167.42	-210.09	-85.45	652.05	620.21	31.84	20.480		
4,600.00	4,569.86	4,538.97	4,528.01	17.88	16.47	-167.21	-216.49	-90.28	670.89	638.33	32.57	20.600		
4,700.00	4,669.01	4,637.15	4,625.86	18.29	16.84	-167.01	-222.89	-95.11	689.75	656.45	33.30	20.715		
4,800.00	4,768.16	4,735.33	4,723.71	18.71	17.22	-166.82	-229.29	-99.94	708.61	674.58	34.03	20.825		
4,900.00	4,867.31	4,833.51	4,821.56	19.12	17.60	-166.64	-235.69	-104.77	727.48	692.72	34.76	20.930		
5,000.00	4,966.46	4,931.69	4,919.41	19.53	17.97	-166.47	-242.08	-109.60	746.35	710.87	35.49	21.032		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,065.61	5,029.86	5,017.26	19.95	18.35	-166.31	-248.48	-114.43	765.23	729.02	36.22	21.129		
5,200.00	5,164.77	5,128.04	5,115.12	20.36	18.72	-166.16	-254.88	-119.26	784.12	747.17	36.95	21.222		
5,300.00	5,263.92	5,226.22	5,212.97	20.77	19.10	-166.01	-261.28	-124.09	803.01	765.33	37.68	21.312		
5,400.00	5,363.07	5,324.40	5,310.82	21.18	19.48	-165.87	-267.68	-128.92	821.91	783.50	38.41	21.398		
5,500.00	5,462.22	5,422.58	5,408.67	21.60	19.86	-165.74	-274.08	-133.75	840.81	801.67	39.14	21.482		
5,600.00	5,561.37	5,520.76	5,506.52	22.01	20.23	-165.61	-280.47	-138.58	859.71	819.84	39.87	21.562		
5,700.00	5,660.52	5,618.94	5,604.37	22.43	20.61	-165.49	-286.87	-143.41	878.62	838.02	40.60	21.639		
5,800.00	5,759.67	5,717.12	5,702.22	22.84	20.99	-165.37	-293.27	-148.24	897.54	856.20	41.33	21.714		
5,900.00	5,858.82	5,815.30	5,800.07	23.25	21.36	-165.26	-299.67	-153.07	916.45	874.39	42.07	21.786		
6,000.00	5,957.97	5,913.48	5,897.93	23.67	21.74	-165.15	-306.07	-157.90	935.37	892.57	42.80	21.855		
6,100.00	6,057.13	6,011.66	5,995.78	24.08	22.12	-165.05	-312.47	-162.73	954.29	910.76	43.53	21.923		
6,200.00	6,156.28	6,109.84	6,093.63	24.49	22.50	-164.95	-318.87	-167.56	973.22	928.96	44.26	21.988		
6,300.00	6,255.43	6,208.01	6,191.48	24.91	22.87	-164.86	-325.26	-172.39	992.15	947.15	44.99	22.051		
6,400.00	6,354.58	6,306.19	6,289.33	25.32	23.25	-164.76	-331.66	-177.22	1,011.08	965.35	45.73	22.112		
6,500.00	6,453.73	6,404.37	6,387.18	25.73	23.63	-164.68	-338.06	-182.04	1,030.01	983.55	46.46	22.171		
6,600.00	6,552.88	6,502.55	6,485.03	26.15	24.01	-164.59	-344.46	-186.87	1,048.95	1,001.76	47.19	22.228		
6,700.00	6,652.03	6,600.73	6,582.89	26.56	24.39	-164.51	-350.86	-191.70	1,067.88	1,019.96	47.92	22.283		
6,800.00	6,751.18	6,698.91	6,680.74	26.98	24.76	-164.43	-357.26	-196.53	1,086.82	1,038.17	48.66	22.337		
6,900.00	6,850.34	6,802.91	6,778.59	27.39	25.16	-164.35	-363.65	-201.36	1,105.77	1,056.36	49.41	22.379		
7,000.00	6,949.49	6,895.27	6,876.44	27.80	25.52	-164.28	-370.05	-206.19	1,124.71	1,074.59	50.12	22.440		
7,011.14	6,960.53	6,906.20	6,887.34	27.85	25.56	-164.27	-370.77	-206.73	1,126.82	1,076.62	50.20	22.445		
7,100.00	7,048.80	7,006.32	6,974.52	28.21	25.95	-164.27	-376.47	-211.03	1,142.35	1,091.45	50.90	22.443		
7,200.00	7,148.46	7,092.60	7,073.11	28.58	26.28	-164.22	-382.91	-215.90	1,156.70	1,105.12	51.58	22.425		
7,300.00	7,248.35	7,227.30	7,207.50	28.94	26.79	-164.09	-390.05	-221.29	1,166.61	1,114.09	52.53	22.210		
7,384.67	7,333.00	7,352.84	7,333.00	29.21	27.22	-179.86	-392.25	-222.94	1,169.30	1,115.97	53.33	21.926		
7,400.00	7,348.33	7,368.17	7,348.33	29.26	27.27	-179.86	-392.25	-222.94	1,169.30	1,115.87	53.43	21.884		
7,414.67	7,363.00	7,382.84	7,363.00	29.31	27.32	-179.86	-392.25	-222.94	1,169.30	1,115.77	53.53	21.843		
7,414.67	7,363.00	7,382.84	7,363.00	29.31	27.32	-179.86	-392.25	-222.94	1,169.30	1,115.77	53.53	21.843		
7,450.00	7,398.31	7,418.31	7,398.45	29.42	27.44	-90.11	-392.24	-224.04	1,169.30	1,115.52	53.78	21.743		
7,500.00	7,448.02	7,468.51	7,448.35	29.58	27.62	-90.11	-392.22	-229.34	1,169.30	1,115.16	54.14	21.596		
7,550.00	7,497.08	7,518.70	7,497.60	29.75	27.82	-90.11	-392.18	-238.98	1,169.30	1,114.77	54.53	21.444		
7,600.00	7,545.12	7,568.89	7,545.80	29.93	28.02	-90.11	-392.12	-252.89	1,169.30	1,114.36	54.94	21.285		
7,650.00	7,591.77	7,619.08	7,592.60	30.11	28.24	-90.10	-392.04	-270.96	1,169.30	1,113.94	55.36	21.120		
7,700.00	7,636.69	7,669.25	7,637.64	30.30	28.46	-90.10	-391.94	-293.05	1,169.30	1,113.48	55.82	20.948		
7,750.00	7,679.52	7,719.42	7,680.56	30.49	28.69	-90.09	-391.83	-318.99	1,169.30	1,113.00	56.30	20.768		
7,800.00	7,719.94	7,769.58	7,721.04	30.70	28.94	-90.09	-391.70	-348.58	1,169.30	1,112.48	56.82	20.578		
7,850.00	7,757.65	7,819.73	7,758.78	30.91	29.21	-90.08	-391.55	-381.59	1,169.30	1,111.91	57.39	20.375		
7,900.00	7,792.35	7,869.87	7,793.47	31.14	29.50	-90.07	-391.40	-417.76	1,169.30	1,111.29	58.01	20.157		
7,950.00	7,823.79	7,919.99	7,824.87	31.39	29.82	-90.07	-391.23	-456.81	1,169.30	1,110.60	58.70	19.921		
8,000.00	7,851.72	7,970.10	7,852.72	31.67	30.18	-90.06	-391.04	-498.45	1,169.30	1,109.85	59.45	19.667		
8,050.00	7,875.93	8,020.20	7,876.83	31.99	30.57	-90.05	-390.85	-542.34	1,169.30	1,109.01	60.29	19.393		
8,100.00	7,896.23	8,070.28	7,897.00	32.35	31.01	-90.04	-390.65	-588.16	1,169.30	1,108.08	61.22	19.100		
8,150.00	7,912.48	8,120.34	7,913.09	32.75	31.50	-90.03	-390.45	-635.55	1,169.30	1,107.07	62.23	18.790		
8,200.00	7,924.55	8,170.39	7,924.99	33.20	32.03	-90.02	-390.23	-684.14	1,169.30	1,105.98	63.33	18.465		
8,250.00	7,932.35	8,220.42	7,932.60	33.70	32.61	-90.01	-390.02	-733.58	1,169.30	1,104.80	64.50	18.129		
8,300.00	7,935.81	8,270.43	7,935.86	34.24	33.22	-90.00	-389.80	-783.47	1,169.30	1,103.57	65.74	17.788		
8,314.73	7,936.00	8,285.16	7,936.00	34.41	33.40	-90.00	-389.74	-798.20	1,169.30	1,103.19	66.11	17.687		
8,400.00	7,936.00	8,370.43	7,936.00	35.44	34.57	-90.00	-389.36	-883.46	1,169.30	1,100.86	68.44	17.085		
8,500.00	7,936.00	8,470.43	7,936.00	36.82	36.06	-90.00	-388.93	-983.46	1,169.30	1,097.87	71.43	16.369		
8,600.00	7,936.00	8,570.43	7,936.00	38.34	37.69	-90.00	-388.49	-1,083.46	1,169.31	1,094.61	74.70	15.654		
8,700.00	7,936.00	8,670.43	7,935.99	39.99	39.44	-90.00	-388.05	-1,183.46	1,169.31	1,091.11	78.19	14.954		
8,800.00	7,936.00	8,770.43	7,935.99	41.75	41.29	-90.00	-387.62	-1,283.46	1,169.31	1,087.41	81.89	14.279		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,936.00	8,870.43	7,935.99	43.62	43.23	-90.00	-387.18	-1,383.46	1,169.31	1,083.54	85.77	13.633		
9,000.00	7,936.00	8,970.43	7,935.99	45.56	45.24	-90.00	-386.75	-1,483.46	1,169.31	1,079.50	89.80	13.021		
9,100.00	7,936.00	9,070.43	7,935.99	47.59	47.33	-90.00	-386.31	-1,583.46	1,169.31	1,075.34	93.97	12.443		
9,200.00	7,936.00	9,170.43	7,935.99	49.67	49.48	-90.00	-385.87	-1,683.46	1,169.31	1,071.05	98.26	11.900		
9,300.00	7,936.00	9,270.43	7,935.99	51.82	51.67	-90.00	-385.44	-1,783.46	1,169.31	1,066.66	102.65	11.391		
9,400.00	7,935.99	9,370.43	7,935.98	54.01	53.91	-90.00	-385.00	-1,883.46	1,169.31	1,062.18	107.13	10.915		
9,500.00	7,935.99	9,470.43	7,935.98	56.25	56.19	-90.00	-384.56	-1,983.45	1,169.31	1,057.63	111.69	10.470		
9,600.00	7,935.99	9,570.43	7,935.98	58.53	58.51	-90.00	-384.13	-2,083.45	1,169.31	1,053.00	116.32	10.053		
9,700.00	7,935.99	9,670.43	7,935.98	60.84	60.86	-90.00	-383.69	-2,183.45	1,169.31	1,048.31	121.01	9.663		
9,800.00	7,935.99	9,770.43	7,935.98	63.18	63.23	-90.00	-383.25	-2,283.45	1,169.32	1,043.56	125.75	9.298		
9,900.00	7,935.99	9,870.43	7,935.98	65.55	65.63	-90.00	-382.82	-2,383.45	1,169.32	1,038.77	130.55	8.957		
10,000.00	7,935.99	9,970.43	7,935.98	67.94	68.05	-90.00	-382.38	-2,483.45	1,169.32	1,033.93	135.39	8.637		
10,100.00	7,935.99	10,070.43	7,935.97	70.35	70.49	-90.00	-381.95	-2,583.45	1,169.32	1,029.05	140.27	8.336		
10,200.00	7,935.99	10,170.43	7,935.97	72.79	72.95	-90.00	-381.51	-2,683.45	1,169.32	1,024.14	145.18	8.054		
10,300.00	7,935.99	10,270.43	7,935.97	75.24	75.43	-90.00	-381.07	-2,783.45	1,169.32	1,019.19	150.13	7.789		
10,400.00	7,935.99	10,370.43	7,935.97	77.70	77.91	-90.00	-380.64	-2,883.45	1,169.32	1,014.22	155.10	7.539		
10,500.00	7,935.99	10,470.43	7,935.97	80.19	80.42	-90.00	-380.20	-2,983.44	1,169.32	1,009.22	160.11	7.303		
10,600.00	7,935.99	10,570.43	7,935.97	82.68	82.93	-90.00	-379.76	-3,083.44	1,169.32	1,004.19	165.13	7.081		
10,700.00	7,935.99	10,670.43	7,935.97	85.19	85.45	-90.00	-379.33	-3,183.44	1,169.32	999.15	170.18	6.871		
10,800.00	7,935.99	10,770.43	7,935.96	87.70	87.99	-90.00	-378.89	-3,283.44	1,169.32	994.08	175.24	6.673		
10,900.00	7,935.99	10,870.43	7,935.96	90.23	90.53	-90.00	-378.45	-3,383.44	1,169.32	989.00	180.33	6.484		
11,000.00	7,935.99	10,970.43	7,935.96	92.77	93.08	-90.00	-378.02	-3,483.44	1,169.33	983.90	185.43	6.306		
11,100.00	7,935.99	11,070.43	7,935.96	95.31	95.64	-90.00	-377.58	-3,583.44	1,169.33	978.78	190.55	6.137		
11,200.00	7,935.99	11,170.43	7,935.96	97.87	98.21	-90.00	-377.14	-3,683.44	1,169.33	973.65	195.68	5.976		
11,300.00	7,935.99	11,270.43	7,935.96	100.43	100.78	-90.00	-376.71	-3,783.44	1,169.33	968.51	200.82	5.823		
11,400.00	7,935.99	11,370.43	7,935.96	102.99	103.36	-90.00	-376.27	-3,883.44	1,169.33	963.35	205.98	5.677		
11,500.00	7,935.98	11,470.43	7,935.95	105.57	105.94	-90.00	-375.84	-3,983.44	1,169.33	958.19	211.14	5.538		
11,600.00	7,935.98	11,570.43	7,935.95	108.15	108.53	-90.00	-375.40	-4,083.43	1,169.33	953.01	216.32	5.406		
11,700.00	7,935.98	11,670.43	7,935.95	110.73	111.12	-90.00	-374.96	-4,183.43	1,169.33	947.82	221.51	5.279		
11,800.00	7,935.98	11,770.43	7,935.95	113.32	113.72	-90.00	-374.53	-4,283.43	1,169.33	942.63	226.70	5.158		
11,900.00	7,935.98	11,870.43	7,935.95	115.91	116.32	-90.00	-374.09	-4,383.43	1,169.33	937.43	231.91	5.042		
12,000.00	7,935.98	11,970.43	7,935.95	118.51	118.93	-90.00	-373.65	-4,483.43	1,169.33	932.21	237.12	4.931		
12,100.00	7,935.98	12,070.43	7,935.94	121.11	121.54	-90.00	-373.22	-4,583.43	1,169.34	927.00	242.34	4.825		
12,200.00	7,935.98	12,170.43	7,935.94	123.72	124.15	-90.00	-372.78	-4,683.43	1,169.34	921.77	247.57	4.723		
12,300.00	7,935.98	12,270.43	7,935.94	126.33	126.77	-90.00	-372.34	-4,783.43	1,169.34	916.54	252.80	4.626		
12,400.00	7,935.98	12,370.43	7,935.94	128.94	129.39	-90.00	-371.91	-4,883.43	1,169.34	911.30	258.04	4.532		
12,500.00	7,935.98	12,470.43	7,935.94	131.56	132.01	-90.00	-371.47	-4,983.43	1,169.34	906.06	263.28	4.441		
12,600.00	7,935.98	12,570.43	7,935.94	134.17	134.64	-90.00	-371.03	-5,083.42	1,169.34	900.81	268.53	4.355		
12,700.00	7,935.98	12,670.43	7,935.94	136.80	137.27	-90.00	-370.60	-5,183.42	1,169.34	895.55	273.79	4.271		
12,800.00	7,935.98	12,770.43	7,935.93	139.42	139.90	-90.00	-370.16	-5,283.42	1,169.34	890.30	279.05	4.190		
12,900.00	7,935.98	12,870.43	7,935.93	142.05	142.53	-90.00	-369.73	-5,383.42	1,169.34	885.03	284.31	4.113		
13,000.00	7,935.98	12,970.43	7,935.93	144.68	145.16	-90.00	-369.29	-5,483.42	1,169.34	879.76	289.58	4.038		
13,100.00	7,935.98	13,070.43	7,935.93	147.31	147.80	-90.00	-368.85	-5,583.42	1,169.34	874.49	294.85	3.966		
13,200.00	7,935.98	13,170.43	7,935.93	149.94	150.44	-90.00	-368.42	-5,683.42	1,169.34	869.22	300.13	3.896		
13,300.00	7,935.98	13,270.43	7,935.93	152.57	153.08	-90.00	-367.98	-5,783.42	1,169.35	863.94	305.41	3.829		
13,400.00	7,935.98	13,370.43	7,935.93	155.21	155.72	-90.00	-367.54	-5,883.42	1,169.35	858.66	310.69	3.764		
13,500.00	7,935.97	13,470.43	7,935.92	157.85	158.36	-90.00	-367.11	-5,983.42	1,169.35	853.37	315.98	3.701		
13,600.00	7,935.97	13,570.43	7,935.92	160.49	161.01	-90.00	-366.67	-6,083.42	1,169.35	848.08	321.27	3.640		
13,700.00	7,935.97	13,670.43	7,935.92	163.13	163.65	-90.00	-366.23	-6,183.41	1,169.35	842.79	326.56	3.581		
13,800.00	7,935.97	13,770.43	7,935.92	165.78	166.30	-90.00	-365.80	-6,283.41	1,169.35	837.50	331.85	3.524		
13,900.00	7,935.97	13,870.43	7,935.92	168.42	168.95	-90.00	-365.36	-6,383.41	1,169.35	832.20	337.15	3.468		
14,000.00	7,935.97	13,970.43	7,935.92	171.07	171.60	-90.00	-364.93	-6,483.41	1,169.35	826.90	342.45	3.415		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	7,935.97	14,070.43	7,935.92	173.72	174.25	-90.00	-364.49	-6,583.41	1,169.35	821.60	347.75	3.363		
14,200.00	7,935.97	14,170.43	7,935.91	176.36	176.91	-90.00	-364.05	-6,683.41	1,169.35	816.29	353.06	3.312		
14,300.00	7,935.97	14,270.43	7,935.91	179.02	179.56	-90.00	-363.62	-6,783.41	1,169.35	810.99	358.37	3.263		
14,400.00	7,935.97	14,370.43	7,935.91	181.67	182.21	-90.00	-363.18	-6,883.41	1,169.36	805.68	363.68	3.215		
14,500.00	7,935.97	14,470.43	7,935.91	184.32	184.87	-90.00	-362.74	-6,983.41	1,169.36	800.37	368.99	3.169		
14,600.00	7,935.97	14,570.43	7,935.91	186.97	187.53	-90.00	-362.31	-7,083.41	1,169.36	795.06	374.30	3.124		
14,700.00	7,935.97	14,670.43	7,935.91	189.63	190.18	-90.00	-361.87	-7,183.40	1,169.36	789.74	379.62	3.080		
14,800.00	7,935.97	14,770.43	7,935.91	192.28	192.84	-90.00	-361.43	-7,283.40	1,169.36	784.42	384.93	3.038		
14,900.00	7,935.97	14,870.43	7,935.90	194.94	195.50	-90.00	-361.00	-7,383.40	1,169.36	779.11	390.25	2.996		
15,000.00	7,935.97	14,970.43	7,935.90	197.60	198.16	-90.00	-360.56	-7,483.40	1,169.36	773.79	395.57	2.956		
15,100.00	7,935.97	15,070.43	7,935.90	200.26	200.82	-90.00	-360.12	-7,583.40	1,169.36	768.47	400.90	2.917		
15,200.00	7,935.97	15,170.43	7,935.90	202.91	203.49	-90.00	-359.69	-7,683.40	1,169.36	763.14	406.22	2.879		
15,300.00	7,935.97	15,270.43	7,935.90	205.57	206.15	-90.00	-359.25	-7,783.40	1,169.36	757.82	411.54	2.841		
15,400.00	7,935.97	15,370.43	7,935.90	208.24	208.81	-90.00	-358.82	-7,883.40	1,169.36	752.49	416.87	2.805		
15,500.00	7,935.97	15,470.43	7,935.90	210.90	211.48	-90.00	-358.38	-7,983.40	1,169.36	747.17	422.20	2.770		
15,600.00	7,935.96	15,570.43	7,935.89	213.56	214.14	-90.00	-357.94	-8,083.40	1,169.37	741.84	427.53	2.735		
15,700.00	7,935.96	15,670.43	7,935.89	216.22	216.81	-90.00	-357.51	-8,183.40	1,169.37	736.51	432.86	2.702		
15,800.00	7,935.96	15,770.43	7,935.89	218.89	219.47	-90.00	-357.07	-8,283.39	1,169.37	731.18	438.19	2.669		
15,900.00	7,935.96	15,870.43	7,935.89	221.55	222.14	-90.00	-356.63	-8,383.39	1,169.37	725.85	443.52	2.637		
16,000.00	7,935.96	15,970.43	7,935.89	224.21	224.80	-90.00	-356.20	-8,483.39	1,169.37	720.51	448.86	2.605		
16,100.00	7,935.96	16,070.43	7,935.89	226.88	227.47	-90.00	-355.76	-8,583.39	1,169.37	715.18	454.19	2.575		
16,200.00	7,935.96	16,170.43	7,935.88	229.55	230.14	-90.00	-355.32	-8,683.39	1,169.37	709.84	459.53	2.545		
16,300.00	7,935.96	16,270.43	7,935.88	232.21	232.81	-90.00	-354.89	-8,783.39	1,169.37	704.51	464.86	2.516		
16,400.00	7,935.96	16,370.43	7,935.88	234.88	235.48	-90.00	-354.45	-8,883.39	1,169.37	699.17	470.20	2.487		
16,500.00	7,935.96	16,470.43	7,935.88	237.55	238.15	-90.00	-354.02	-8,983.39	1,169.37	693.83	475.54	2.459		
16,600.00	7,935.96	16,570.43	7,935.88	240.21	240.82	-90.00	-353.58	-9,083.39	1,169.37	688.49	480.88	2.432		
16,700.00	7,935.96	16,670.43	7,935.88	242.88	243.49	-90.00	-353.14	-9,183.39	1,169.37	683.15	486.22	2.405		
16,800.00	7,935.96	16,770.43	7,935.88	245.55	246.16	-90.00	-352.71	-9,283.38	1,169.38	677.81	491.56	2.379		
16,900.00	7,935.96	16,870.43	7,935.87	248.22	248.83	-90.00	-352.27	-9,383.38	1,169.38	672.47	496.90	2.353		
17,000.00	7,935.96	16,970.43	7,935.87	250.89	251.50	-90.00	-351.83	-9,483.38	1,169.38	667.13	502.25	2.328		
17,100.00	7,935.96	17,070.43	7,935.87	253.56	254.17	-90.00	-351.40	-9,583.38	1,169.38	661.79	507.59	2.304		
17,200.00	7,935.96	17,170.43	7,935.87	256.23	256.85	-90.00	-350.96	-9,683.38	1,169.38	656.44	512.94	2.280		
17,300.00	7,935.96	17,270.43	7,935.87	258.90	259.52	-90.00	-350.52	-9,783.38	1,169.38	651.10	518.28	2.256		
17,400.00	7,935.96	17,370.43	7,935.87	261.58	262.19	-90.00	-350.09	-9,883.38	1,169.38	645.75	523.63	2.233		
17,500.00	7,935.96	17,470.43	7,935.87	264.25	264.86	-90.00	-349.65	-9,983.38	1,169.38	640.41	528.97	2.211		
17,600.00	7,935.96	17,570.43	7,935.86	266.92	267.54	-90.00	-349.21	-10,083.38	1,169.38	635.06	534.32	2.189		
17,700.00	7,935.95	17,670.43	7,935.86	269.59	270.21	-90.00	-348.78	-10,183.38	1,169.38	629.71	539.67	2.167		
17,800.00	7,935.95	17,770.43	7,935.86	272.26	272.89	-90.00	-348.34	-10,283.38	1,169.38	624.37	545.02	2.146		
17,900.00	7,935.95	17,870.43	7,935.86	274.94	275.56	-90.00	-347.91	-10,383.37	1,169.39	619.02	550.37	2.125		
17,994.19	7,935.95	17,964.41	7,935.99	277.46	278.08	-90.00	-347.51	-10,477.36	1,169.40	614.00	555.40	2.106		
17,997.91	7,936.00	17,968.13	7,936.00	277.56	278.17	-90.00	-347.49	-10,481.07	1,169.31	613.72	555.60	2.105 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.00	90.00					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	90.00	90.00	89.73	0.27	334.753		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	90.00	90.00	89.01	0.99	91.296		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	90.00	90.00	88.30	1.70	52.856		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	90.00	90.00	87.58	2.42	37.195		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	90.00	90.00	86.86	3.14	28.693		
600.00	600.00	600.00	600.00	1.93	1.93	90.00	0.00	90.00	90.00	86.15	3.85	23.355		
700.00	700.00	700.00	700.00	2.29	2.29	90.00	0.00	90.00	90.00	85.43	4.57	19.691		
800.00	800.00	800.00	800.00	2.64	2.64	90.00	0.00	90.00	90.00	84.71	5.29	17.021 CC		
900.00	899.98	899.98	899.98	3.00	3.00	106.87	0.00	90.00	90.49	84.49	6.00	15.073 ES		
1,000.00	999.84	1,000.77	1,000.75	3.36	3.35	111.04	-1.65	89.35	91.64	84.93	6.70	13.668		
1,100.00	1,099.45	1,100.58	1,100.41	3.72	3.68	119.00	-6.52	87.41	94.21	86.82	7.39	12.742		
1,173.53	1,172.47	1,172.97	1,172.55	3.99	3.92	126.71	-12.08	85.21	98.45	90.54	7.91	12.450		
1,200.00	1,198.72	1,198.80	1,198.25	4.09	4.01	129.70	-14.47	84.26	100.64	92.55	8.09	12.435		
1,300.00	1,297.87	1,312.52	1,294.12	4.47	4.41	140.74	-25.31	79.96	111.68	102.82	8.86	12.612		
1,400.00	1,397.02	1,407.91	1,389.88	4.85	4.76	150.42	-37.94	74.95	126.97	117.42	9.55	13.291		
1,500.00	1,496.17	1,488.80	1,485.63	5.24	5.07	157.93	-50.58	69.94	145.13	134.93	10.19	14.235		
1,600.00	1,595.32	1,585.52	1,581.39	5.63	5.44	163.74	-63.22	64.93	165.21	154.32	10.90	15.163		
1,700.00	1,694.47	1,682.24	1,677.15	6.03	5.82	168.28	-75.85	59.92	186.60	175.00	11.60	16.089		
1,800.00	1,793.62	1,778.95	1,772.90	6.43	6.20	171.89	-88.49	54.91	208.89	196.59	12.30	16.980		
1,900.00	1,892.78	1,875.67	1,868.66	6.83	6.59	174.80	-101.12	49.90	231.83	218.82	13.01	17.822		
2,000.00	1,991.93	1,972.39	1,964.42	7.23	6.98	177.18	-113.76	44.89	255.24	241.52	13.72	18.608		
2,100.00	2,091.08	2,069.10	2,060.17	7.63	7.37	179.17	-126.39	39.88	278.99	264.57	14.43	19.339		
2,200.00	2,190.23	2,165.82	2,155.93	8.04	7.77	-179.16	-139.03	34.87	303.02	287.88	15.14	20.016		
2,300.00	2,289.38	2,262.54	2,251.69	8.44	8.17	-177.73	-151.66	29.86	327.26	311.41	15.85	20.644		
2,400.00	2,388.53	2,359.25	2,347.44	8.85	8.57	-176.49	-164.30	24.85	351.66	335.09	16.57	21.226		
2,500.00	2,487.68	2,455.97	2,443.20	9.25	8.98	-175.42	-176.93	19.84	376.20	358.92	17.28	21.766		
2,600.00	2,586.83	2,552.69	2,538.95	9.66	9.38	-174.48	-189.57	14.83	400.85	382.84	18.00	22.267		
2,700.00	2,685.99	2,649.40	2,634.71	10.07	9.79	-173.64	-202.20	9.82	425.58	406.86	18.72	22.734		
2,800.00	2,785.14	2,746.12	2,730.47	10.48	10.19	-172.90	-214.84	4.81	450.40	430.96	19.44	23.169		
2,900.00	2,884.29	2,842.83	2,826.22	10.89	10.60	-172.24	-227.47	-0.20	475.27	455.11	20.16	23.575		
3,000.00	2,983.44	2,939.55	2,921.98	11.30	11.01	-171.64	-240.11	-5.21	500.20	479.32	20.88	23.954		
3,100.00	3,082.59	3,036.27	3,017.74	11.71	11.42	-171.10	-252.74	-10.22	525.18	503.58	21.60	24.310		
3,200.00	3,181.74	3,132.98	3,113.49	12.12	11.83	-170.60	-265.38	-15.23	550.20	527.87	22.33	24.644		
3,300.00	3,280.89	3,229.70	3,209.25	12.53	12.24	-170.15	-278.01	-20.24	575.25	552.20	23.05	24.958		
3,400.00	3,380.04	3,326.42	3,305.01	12.94	12.65	-169.74	-290.65	-25.25	600.33	576.56	23.77	25.253		
3,500.00	3,479.20	3,423.13	3,400.76	13.35	13.06	-169.36	-303.28	-30.26	625.44	600.94	24.50	25.532		
3,600.00	3,578.35	3,519.85	3,496.52	13.76	13.48	-169.01	-315.92	-35.27	650.57	625.35	25.22	25.795		
3,700.00	3,677.50	3,616.57	3,592.28	14.17	13.89	-168.69	-328.55	-40.28	675.73	649.78	25.95	26.043		
3,800.00	3,776.65	3,713.28	3,688.03	14.58	14.30	-168.39	-341.19	-45.29	700.90	674.23	26.67	26.279		
3,900.00	3,875.80	3,810.00	3,783.79	14.99	14.72	-168.11	-353.82	-50.30	726.09	698.69	27.40	26.502		
4,000.00	3,974.95	3,906.72	3,879.55	15.41	15.13	-167.84	-366.46	-55.31	751.30	723.17	28.12	26.714		
4,100.00	4,074.10	4,003.43	3,975.30	15.82	15.54	-167.60	-379.10	-60.32	776.51	747.66	28.85	26.915		
4,200.00	4,173.25	4,100.15	4,071.06	16.23	15.96	-167.37	-391.73	-65.33	801.75	772.17	29.58	27.107		
4,300.00	4,272.40	4,203.14	4,166.82	16.64	16.40	-167.16	-404.37	-70.34	826.99	796.66	30.33	27.268		
4,400.00	4,371.56	4,306.42	4,262.57	17.06	16.84	-166.95	-417.00	-75.35	852.24	821.16	31.08	27.421		
4,500.00	4,470.71	4,409.70	4,358.33	17.47	17.29	-166.76	-429.64	-80.36	877.50	845.67	31.83	27.566		
4,600.00	4,569.86	4,487.01	4,454.09	17.88	17.62	-166.58	-442.27	-85.37	902.77	870.29	32.49	27.789		
4,700.00	4,669.01	4,583.73	4,549.84	18.29	18.03	-166.41	-454.91	-90.38	928.05	894.84	33.21	27.941		
4,800.00	4,768.16	4,680.45	4,645.60	18.71	18.45	-166.25	-467.54	-95.39	953.34	919.40	33.94	28.086		
4,900.00	4,867.31	4,777.16	4,741.36	19.12	18.86	-166.10	-480.18	-100.40	978.63	943.96	34.67	28.226		
5,000.00	4,966.46	4,873.88	4,837.11	19.53	19.28	-165.95	-492.81	-105.41	1,003.93	968.53	35.40	28.359		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,065.61	4,970.60	4,932.87	19.95	19.70	-165.82	-505.45	-110.42	1,029.23	993.11	36.13	28.487		
5,200.00	5,164.77	5,067.31	5,028.63	20.36	20.11	-165.68	-518.08	-115.43	1,054.54	1,017.69	36.86	28.611		
5,300.00	5,263.92	5,164.03	5,124.38	20.77	20.53	-165.56	-530.72	-120.44	1,079.86	1,042.27	37.59	28.729		
5,400.00	5,363.07	5,260.75	5,220.14	21.18	20.95	-165.44	-543.35	-125.45	1,105.18	1,066.86	38.32	28.843		
5,500.00	5,462.22	5,357.46	5,315.90	21.60	21.36	-165.33	-555.99	-130.46	1,130.50	1,091.46	39.05	28.952		
5,600.00	5,561.37	5,454.18	5,411.65	22.01	21.78	-165.22	-568.62	-135.47	1,155.83	1,116.05	39.78	29.058		
5,700.00	5,660.52	5,550.89	5,507.41	22.43	22.20	-165.11	-581.26	-140.48	1,181.16	1,140.65	40.51	29.160		
5,800.00	5,759.67	5,647.61	5,603.16	22.84	22.61	-165.01	-593.89	-145.49	1,206.50	1,165.26	41.24	29.258		
5,900.00	5,858.82	5,744.33	5,698.92	23.25	23.03	-164.92	-606.53	-150.50	1,231.83	1,189.87	41.97	29.352		
6,000.00	5,957.97	5,841.04	5,794.68	23.67	23.45	-164.82	-619.16	-155.51	1,257.18	1,214.48	42.70	29.444		
6,100.00	6,057.13	5,937.76	5,890.43	24.08	23.86	-164.74	-631.80	-160.52	1,282.52	1,239.09	43.43	29.532		
6,200.00	6,156.28	6,034.48	5,986.19	24.49	24.28	-164.65	-644.43	-165.53	1,307.87	1,263.71	44.16	29.617		
6,300.00	6,255.43	6,131.19	6,081.95	24.91	24.70	-164.57	-657.07	-170.54	1,333.22	1,288.33	44.89	29.700		
6,400.00	6,354.58	6,227.91	6,177.70	25.32	25.12	-164.49	-669.70	-175.55	1,358.57	1,312.95	45.62	29.780		
6,500.00	6,453.73	6,324.63	6,273.46	25.73	25.53	-164.41	-682.34	-180.56	1,383.92	1,337.57	46.35	29.857		
6,600.00	6,552.88	6,421.34	6,369.22	26.15	25.95	-164.34	-694.98	-185.57	1,409.28	1,362.20	47.08	29.932		
6,700.00	6,652.03	6,518.06	6,464.97	26.56	26.37	-164.27	-707.61	-190.59	1,434.64	1,386.82	47.81	30.004		
6,800.00	6,751.18	6,614.78	6,560.73	26.98	26.79	-164.20	-720.25	-195.60	1,460.00	1,411.45	48.55	30.074		
6,900.00	6,850.34	6,711.49	6,656.49	27.39	27.20	-164.14	-732.88	-200.61	1,485.36	1,436.08	49.28	30.142		
7,000.00	6,949.49	6,808.21	6,752.24	27.80	27.62	-164.07	-745.52	-205.62	1,510.73	1,460.72	50.01	30.208		
7,011.14	6,960.53	6,818.98	6,762.91	27.85	27.67	-164.07	-746.92	-206.17	1,513.55	1,463.46	50.09	30.216		
7,100.00	7,048.80	6,905.24	6,848.31	28.21	28.04	-164.12	-758.19	-210.64	1,534.81	1,484.07	50.74	30.248		
7,200.00	7,148.46	7,066.53	7,008.35	28.58	28.71	-164.08	-776.71	-217.99	1,554.37	1,502.48	51.89	29.956		
7,300.00	7,248.35	7,268.06	7,209.45	28.94	29.45	-164.06	-788.30	-222.58	1,564.63	1,511.51	53.12	29.454		
7,384.67	7,333.00	7,391.73	7,333.11	29.21	29.83	-179.89	-789.25	-223.21	1,566.30	1,512.46	53.84	29.092		
7,400.00	7,348.33	7,407.13	7,348.50	29.26	29.88	-179.86	-789.25	-223.88	1,566.30	1,512.36	53.94	29.035		
7,414.67	7,363.00	7,421.83	7,363.16	29.31	29.92	-179.82	-789.24	-224.90	1,566.30	1,512.25	54.05	28.980		
7,437.04	7,385.37	7,444.16	7,385.38	29.38	30.00	-90.01	-789.23	-227.17	1,566.30	1,512.10	54.20	28.897		
7,450.00	7,398.31	7,457.07	7,398.17	29.42	30.04	-89.97	-789.23	-228.88	1,566.30	1,512.00	54.29	28.848		
7,500.00	7,448.02	7,506.64	7,448.86	29.58	30.21	-89.82	-789.19	-238.10	1,566.31	1,511.65	54.66	28.656		
7,550.00	7,497.08	7,555.87	7,494.24	29.75	30.40	-89.67	-789.13	-251.38	1,566.33	1,511.29	55.04	28.458		
7,600.00	7,545.12	7,604.76	7,540.01	29.93	30.58	-89.53	-789.06	-268.56	1,566.36	1,510.91	55.44	28.252		
7,650.00	7,591.77	7,653.34	7,583.86	30.11	30.77	-89.39	-788.97	-289.42	1,566.39	1,510.53	55.86	28.039		
7,700.00	7,636.69	7,701.62	7,625.54	30.30	30.97	-89.25	-788.86	-313.76	1,566.44	1,510.13	56.31	27.818		
7,750.00	7,679.52	7,749.61	7,664.80	30.49	31.18	-89.12	-788.74	-341.35	1,566.49	1,509.71	56.79	27.585		
7,800.00	7,719.94	7,797.34	7,701.41	30.70	31.39	-89.00	-788.61	-371.94	1,566.55	1,509.25	57.30	27.339		
7,850.00	7,757.65	7,844.83	7,735.19	30.91	31.62	-88.88	-788.47	-405.30	1,566.61	1,508.75	57.86	27.075		
7,900.00	7,792.35	7,892.09	7,765.95	31.14	31.86	-88.78	-788.32	-441.16	1,566.68	1,508.20	58.47	26.793		
7,950.00	7,823.79	7,939.15	7,793.53	31.39	32.12	-88.68	-788.15	-479.27	1,566.74	1,507.59	59.15	26.488		
8,000.00	7,851.72	7,986.02	7,817.81	31.67	32.40	-88.59	-787.98	-519.35	1,566.80	1,506.91	59.89	26.159		
8,050.00	7,875.93	8,032.73	7,838.67	31.99	32.71	-88.51	-787.80	-561.13	1,566.86	1,506.15	60.72	25.807		
8,100.00	7,896.23	8,079.30	7,856.01	32.35	33.06	-88.44	-787.62	-604.33	1,566.91	1,505.30	61.62	25.430		
8,150.00	7,912.48	8,125.75	7,869.75	32.75	33.44	-88.39	-787.43	-648.69	1,566.96	1,504.36	62.60	25.032		
8,200.00	7,924.55	8,172.11	7,879.84	33.20	33.86	-88.34	-787.24	-693.92	1,567.00	1,503.34	63.66	24.616		
8,250.00	7,932.35	8,218.39	7,886.24	33.70	34.32	-88.31	-787.04	-739.75	1,567.03	1,502.24	64.79	24.187		
8,300.00	7,935.81	8,264.62	7,888.91	34.24	34.81	-88.28	-786.84	-785.89	1,567.05	1,501.08	65.98	23.752		
8,314.73	7,936.00	8,278.53	7,889.00	34.41	34.97	-88.28	-786.78	-799.80	1,567.06	1,500.71	66.34	23.621		
8,400.00	7,936.00	8,363.80	7,889.00	35.44	36.02	-88.28	-786.42	-885.07	1,567.06	1,498.39	68.67	22.820		
8,500.00	7,936.00	8,463.80	7,889.00	36.82	37.39	-88.28	-785.99	-985.07	1,567.07	1,495.41	71.66	21.868		
8,600.00	7,936.00	8,563.80	7,889.00	38.34	38.92	-88.28	-785.56	-1,085.07	1,567.08	1,492.16	74.92	20.917		
8,700.00	7,936.00	8,663.81	7,889.00	39.99	40.58	-88.28	-785.13	-1,185.07	1,567.09	1,488.68	78.41	19.985		
8,800.00	7,936.00	8,763.81	7,888.99	41.75	42.35	-88.28	-784.70	-1,285.07	1,567.10	1,484.99	82.11	19.086		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,936.00	8,863.81	7,888.99	43.62	44.23	-88.28	-784.27	-1,385.08	1,567.11	1,481.13	85.98	18.226		
9,000.00	7,936.00	8,963.82	7,888.99	45.56	46.19	-88.28	-783.84	-1,485.08	1,567.12	1,477.11	90.01	17.411		
9,100.00	7,936.00	9,063.82	7,888.99	47.59	48.22	-88.28	-783.42	-1,585.08	1,567.12	1,472.95	94.17	16.641		
9,200.00	7,936.00	9,163.82	7,888.99	49.67	50.32	-88.28	-782.99	-1,685.08	1,567.13	1,468.68	98.45	15.918		
9,300.00	7,936.00	9,263.82	7,888.99	51.82	52.48	-88.28	-782.56	-1,785.08	1,567.14	1,464.30	102.84	15.239		
9,400.00	7,935.99	9,363.83	7,888.99	54.01	54.68	-88.28	-782.13	-1,885.09	1,567.15	1,459.84	107.31	14.604		
9,500.00	7,935.99	9,463.83	7,888.99	56.25	56.93	-88.28	-781.70	-1,985.09	1,567.15	1,455.29	111.86	14.009		
9,600.00	7,935.99	9,563.83	7,888.99	58.53	59.22	-88.28	-781.27	-2,085.09	1,567.16	1,450.67	116.49	13.453		
9,700.00	7,935.99	9,663.83	7,888.99	60.84	61.54	-88.28	-780.84	-2,185.09	1,567.17	1,445.99	121.18	12.933		
9,800.00	7,935.99	9,763.84	7,888.99	63.18	63.89	-88.28	-780.41	-2,285.09	1,567.18	1,441.26	125.92	12.446		
9,900.00	7,935.99	9,863.84	7,888.99	65.55	66.26	-88.28	-779.97	-2,385.09	1,567.18	1,436.47	130.71	11.990		
10,000.00	7,935.99	9,963.84	7,888.99	67.94	68.66	-88.28	-779.54	-2,485.10	1,567.19	1,431.65	135.54	11.562		
10,100.00	7,935.99	10,063.85	7,888.99	70.35	71.09	-88.28	-779.11	-2,585.10	1,567.19	1,426.78	140.42	11.161		
10,200.00	7,935.99	10,163.85	7,888.99	72.79	73.53	-88.28	-778.68	-2,685.10	1,567.20	1,421.87	145.33	10.784		
10,300.00	7,935.99	10,263.85	7,888.99	75.24	75.98	-88.28	-778.25	-2,785.10	1,567.21	1,416.94	150.27	10.429		
10,400.00	7,935.99	10,363.85	7,888.99	77.70	78.46	-88.28	-777.82	-2,885.10	1,567.21	1,411.97	155.24	10.096		
10,500.00	7,935.99	10,463.86	7,888.99	80.19	80.94	-88.28	-777.39	-2,985.10	1,567.22	1,406.98	160.24	9.781		
10,600.00	7,935.99	10,563.86	7,888.99	82.68	83.44	-88.28	-776.96	-3,085.11	1,567.22	1,401.97	165.26	9.484		
10,700.00	7,935.99	10,663.86	7,888.99	85.19	85.96	-88.28	-776.52	-3,185.11	1,567.23	1,396.93	170.30	9.203		
10,800.00	7,935.99	10,763.86	7,888.99	87.70	88.48	-88.28	-776.09	-3,285.11	1,567.23	1,391.87	175.36	8.937		
10,900.00	7,935.99	10,863.87	7,888.99	90.23	91.01	-88.28	-775.66	-3,385.11	1,567.24	1,386.80	180.44	8.686		
11,000.00	7,935.99	10,963.87	7,888.99	92.77	93.55	-88.28	-775.23	-3,485.11	1,567.24	1,381.70	185.54	8.447		
11,100.00	7,935.99	11,063.87	7,888.99	95.31	96.10	-88.28	-774.79	-3,585.11	1,567.25	1,376.60	190.65	8.220		
11,200.00	7,935.99	11,163.87	7,888.99	97.87	98.66	-88.28	-774.36	-3,685.12	1,567.25	1,371.47	195.78	8.005		
11,300.00	7,935.99	11,263.88	7,888.99	100.43	101.22	-88.28	-773.93	-3,785.12	1,567.26	1,366.34	200.92	7.800		
11,400.00	7,935.99	11,363.88	7,888.99	102.99	103.79	-88.28	-773.49	-3,885.12	1,567.26	1,361.19	206.07	7.605		
11,500.00	7,935.98	11,463.88	7,888.99	105.57	106.37	-88.28	-773.06	-3,985.12	1,567.26	1,356.03	211.23	7.420		
11,600.00	7,935.98	11,563.89	7,888.99	108.15	108.95	-88.28	-772.63	-4,085.12	1,567.27	1,350.86	216.41	7.242		
11,700.00	7,935.98	11,663.89	7,888.99	110.73	111.53	-88.28	-772.19	-4,185.13	1,567.27	1,345.68	221.59	7.073		
11,800.00	7,935.98	11,763.89	7,888.99	113.32	114.13	-88.28	-771.76	-4,285.13	1,567.28	1,340.49	226.78	6.911		
11,900.00	7,935.98	11,863.89	7,888.99	115.91	116.72	-88.28	-771.33	-4,385.13	1,567.28	1,335.29	231.98	6.756		
12,000.00	7,935.98	11,963.90	7,888.99	118.51	119.32	-88.28	-770.89	-4,485.13	1,567.28	1,330.09	237.19	6.608		
12,100.00	7,935.98	12,063.90	7,888.99	121.11	121.93	-88.28	-770.46	-4,585.13	1,567.28	1,324.88	242.41	6.465		
12,200.00	7,935.98	12,163.90	7,888.99	123.72	124.53	-88.28	-770.02	-4,685.13	1,567.29	1,319.65	247.63	6.329		
12,300.00	7,935.98	12,263.90	7,888.99	126.33	127.15	-88.28	-769.59	-4,785.14	1,567.29	1,314.43	252.86	6.198		
12,400.00	7,935.98	12,363.91	7,888.99	128.94	129.76	-88.28	-769.15	-4,885.14	1,567.29	1,309.19	258.10	6.072		
12,500.00	7,935.98	12,463.91	7,888.99	131.56	132.38	-88.28	-768.72	-4,985.14	1,567.29	1,303.96	263.34	5.952		
12,600.00	7,935.98	12,563.91	7,888.99	134.17	135.00	-88.28	-768.28	-5,085.14	1,567.30	1,298.71	268.58	5.835		
12,700.00	7,935.98	12,663.91	7,888.99	136.80	137.62	-88.28	-767.85	-5,185.14	1,567.30	1,293.46	273.84	5.723		
12,800.00	7,935.98	12,763.92	7,888.99	139.42	140.25	-88.28	-767.41	-5,285.14	1,567.30	1,288.21	279.09	5.616		
12,900.00	7,935.98	12,863.92	7,888.99	142.05	142.87	-88.28	-766.98	-5,385.15	1,567.30	1,282.95	284.35	5.512		
13,000.00	7,935.98	12,963.92	7,888.99	144.68	145.51	-88.28	-766.54	-5,485.15	1,567.30	1,277.68	289.62	5.412		
13,100.00	7,935.98	13,063.93	7,888.99	147.31	148.14	-88.28	-766.10	-5,585.15	1,567.30	1,272.42	294.89	5.315		
13,200.00	7,935.98	13,163.93	7,888.99	149.94	150.77	-88.28	-765.67	-5,685.15	1,567.30	1,267.14	300.16	5.222		
13,300.00	7,935.98	13,263.93	7,888.99	152.57	153.41	-88.28	-765.23	-5,785.15	1,567.31	1,261.87	305.44	5.131		
13,400.00	7,935.98	13,363.93	7,888.99	155.21	156.05	-88.28	-764.79	-5,885.15	1,567.31	1,256.59	310.72	5.044		
13,500.00	7,935.97	13,463.94	7,888.99	157.85	158.69	-88.28	-764.36	-5,985.16	1,567.31	1,251.31	316.00	4.960		
13,600.00	7,935.97	13,563.94	7,888.99	160.49	161.33	-88.28	-763.92	-6,085.16	1,567.31	1,246.02	321.29	4.878		
13,700.00	7,935.97	13,663.94	7,888.99	163.13	163.97	-88.28	-763.48	-6,185.16	1,567.31	1,240.73	326.58	4.799		
13,800.00	7,935.97	13,763.94	7,888.99	165.78	166.62	-88.28	-763.05	-6,285.16	1,567.31	1,235.44	331.87	4.723		
13,900.00	7,935.97	13,863.95	7,888.99	168.42	169.26	-88.28	-762.61	-6,385.16	1,567.31	1,230.14	337.16	4.648		
14,000.00	7,935.97	13,963.95	7,888.99	171.07	171.91	-88.28	-762.17	-6,485.17	1,567.31	1,224.84	342.46	4.577		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-8 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	7,935.97	14,063.95	7,888.97	173.72	174.56	-88.28	-761.73	-6,585.17	1,567.31	1,219.54	347.76	4.507		
14,200.00	7,935.97	14,163.96	7,888.97	176.36	177.21	-88.28	-761.30	-6,685.17	1,567.31	1,214.24	353.06	4.439		
14,300.00	7,935.97	14,263.96	7,888.97	179.02	179.86	-88.28	-760.86	-6,785.17	1,567.30	1,208.94	358.37	4.373		
14,400.00	7,935.97	14,363.96	7,888.97	181.67	182.51	-88.28	-760.42	-6,885.17	1,567.30	1,203.63	363.67	4.310		
14,500.00	7,935.97	14,463.96	7,888.97	184.32	185.17	-88.28	-759.98	-6,985.17	1,567.30	1,198.32	368.98	4.248		
14,600.00	7,935.97	14,563.97	7,888.97	186.97	187.82	-88.28	-759.54	-7,085.18	1,567.30	1,193.01	374.29	4.187		
14,700.00	7,935.97	14,663.97	7,888.97	189.63	190.48	-88.28	-759.10	-7,185.18	1,567.30	1,187.69	379.61	4.129		
14,800.00	7,935.97	14,763.97	7,888.97	192.28	193.13	-88.28	-758.66	-7,285.18	1,567.30	1,182.38	384.92	4.072		
14,900.00	7,935.97	14,863.97	7,888.97	194.94	195.79	-88.28	-758.22	-7,385.18	1,567.30	1,177.06	390.24	4.016		
15,000.00	7,935.97	14,963.98	7,888.97	197.60	198.45	-88.28	-757.79	-7,485.18	1,567.29	1,171.74	395.55	3.962		
15,100.00	7,935.97	15,063.98	7,888.97	200.26	201.11	-88.28	-757.35	-7,585.18	1,567.29	1,166.42	400.87	3.910		
15,200.00	7,935.97	15,163.98	7,888.97	202.91	203.77	-88.28	-756.91	-7,685.19	1,567.29	1,161.09	406.19	3.858		
15,300.00	7,935.97	15,263.98	7,888.97	205.57	206.43	-88.28	-756.47	-7,785.19	1,567.29	1,155.77	411.52	3.809		
15,400.00	7,935.97	15,363.99	7,888.98	208.24	209.09	-88.28	-756.03	-7,885.19	1,567.28	1,150.44	416.84	3.760		
15,500.00	7,935.97	15,463.99	7,888.98	210.90	211.75	-88.28	-755.59	-7,985.19	1,567.28	1,145.11	422.17	3.712		
15,600.00	7,935.96	15,563.99	7,888.98	213.56	214.42	-88.28	-755.15	-8,085.19	1,567.28	1,139.79	427.49	3.666		
15,700.00	7,935.96	15,664.00	7,888.98	216.22	217.08	-88.28	-754.71	-8,185.19	1,567.27	1,134.45	432.82	3.621		
15,800.00	7,935.96	15,764.00	7,888.98	218.89	219.74	-88.28	-754.26	-8,285.20	1,567.27	1,129.12	438.15	3.577		
15,900.00	7,935.96	15,864.00	7,888.98	221.55	222.41	-88.28	-753.82	-8,385.20	1,567.27	1,123.79	443.48	3.534		
16,000.00	7,935.96	15,964.00	7,888.98	224.21	225.07	-88.28	-753.38	-8,485.20	1,567.26	1,118.45	448.81	3.492		
16,100.00	7,935.96	16,064.01	7,888.98	226.88	227.74	-88.28	-752.94	-8,585.20	1,567.26	1,113.12	454.14	3.451		
16,200.00	7,935.96	16,164.01	7,888.98	229.55	230.41	-88.28	-752.50	-8,685.20	1,567.25	1,107.78	459.47	3.411		
16,300.00	7,935.96	16,264.01	7,888.98	232.21	233.07	-88.28	-752.06	-8,785.20	1,567.25	1,102.44	464.81	3.372		
16,400.00	7,935.96	16,364.01	7,888.98	234.88	235.74	-88.28	-751.62	-8,885.21	1,567.25	1,097.10	470.14	3.334		
16,500.00	7,935.96	16,464.02	7,888.98	237.55	238.41	-88.28	-751.18	-8,985.21	1,567.24	1,091.76	475.48	3.296		
16,600.00	7,935.96	16,564.02	7,888.98	240.21	241.08	-88.28	-750.73	-9,085.21	1,567.24	1,086.42	480.82	3.260		
16,700.00	7,935.96	16,664.02	7,888.99	242.88	243.75	-88.28	-750.29	-9,185.21	1,567.23	1,081.08	486.15	3.224		
16,800.00	7,935.96	16,764.02	7,888.99	245.55	246.42	-88.28	-749.85	-9,285.21	1,567.23	1,075.73	491.49	3.189		
16,900.00	7,935.96	16,864.03	7,888.99	248.22	249.09	-88.28	-749.41	-9,385.21	1,567.22	1,070.39	496.83	3.154		
17,000.00	7,935.96	16,964.03	7,888.99	250.89	251.76	-88.28	-748.96	-9,485.22	1,567.22	1,065.04	502.17	3.121		
17,100.00	7,935.96	17,064.03	7,888.99	253.56	254.43	-88.28	-748.52	-9,585.22	1,567.21	1,059.70	507.51	3.088		
17,200.00	7,935.96	17,164.04	7,888.99	256.23	257.10	-88.28	-748.08	-9,685.22	1,567.20	1,054.35	512.86	3.056		
17,300.00	7,935.96	17,264.04	7,888.99	258.90	259.77	-88.28	-747.63	-9,785.22	1,567.20	1,049.00	518.20	3.024		
17,400.00	7,935.96	17,364.04	7,888.99	261.58	262.44	-88.28	-747.19	-9,885.22	1,567.19	1,043.65	523.54	2.993		
17,500.00	7,935.96	17,464.04	7,888.99	264.25	265.11	-88.28	-746.75	-9,985.23	1,567.19	1,038.30	528.89	2.963		
17,600.00	7,935.96	17,564.05	7,889.00	266.92	267.79	-88.28	-746.30	-10,085.23	1,567.18	1,032.95	534.23	2.934		
17,700.00	7,935.95	17,664.05	7,889.00	269.59	270.46	-88.28	-745.86	-10,185.23	1,567.17	1,027.60	539.58	2.904		
17,800.00	7,935.95	17,764.05	7,889.00	272.26	273.13	-88.28	-745.42	-10,285.23	1,567.17	1,022.24	544.92	2.876		
17,900.00	7,935.95	17,864.05	7,889.00	274.94	275.81	-88.28	-744.97	-10,385.23	1,567.16	1,016.89	550.27	2.848		
17,997.91	7,936.00	17,961.97	7,889.00	277.56	278.42	-88.28	-744.54	-10,483.14	1,567.07	1,011.57	555.50	2.821 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-9 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	109.69	109.69					
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	109.69	109.69	109.42	0.27	407.980		
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	109.69	109.69	108.70	0.99	111.267		
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	109.69	109.69	107.98	1.70	64.418		
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	109.69	109.69	107.27	2.42	45.331		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	109.69	109.69	106.55	3.14	34.970		
600.00	600.00	600.00	600.00	1.93	1.93	90.00	0.00	109.69	109.69	105.83	3.85	28.464		
700.00	700.00	700.00	700.00	2.29	2.29	90.00	0.00	109.69	109.69	105.12	4.57	23.999		
800.00	800.00	801.01	800.99	2.64	2.63	90.90	-1.71	109.20	109.22	103.95	5.27	20.712		
900.00	899.98	901.65	901.48	3.00	2.97	110.32	-6.83	107.76	108.58	102.61	5.96	18.206		
910.68	910.65	912.34	912.15	3.04	3.00	110.92	-7.57	107.55	108.57	102.53	6.04	17.979 CC, ES		
1,000.00	999.84	1,001.25	1,000.69	3.36	3.31	117.34	-15.23	105.38	109.51	102.84	6.66	16.436		
1,100.00	1,099.45	1,099.16	1,097.87	3.72	3.66	127.05	-26.72	102.13	114.34	106.97	7.38	15.504		
1,173.53	1,172.47	1,169.73	1,167.62	3.99	3.92	135.06	-36.97	99.23	121.96	114.05	7.91	15.426		
1,200.00	1,198.72	1,194.82	1,192.36	4.09	4.02	137.98	-41.02	98.09	125.66	117.56	8.10	15.523		
1,300.00	1,297.87	1,288.44	1,284.31	4.47	4.39	148.16	-57.95	93.30	143.27	134.47	8.80	16.284		
1,400.00	1,397.02	1,383.04	1,376.88	4.85	4.79	156.64	-76.70	88.00	165.64	156.14	9.50	17.435		
1,500.00	1,496.17	1,477.78	1,469.59	5.24	5.21	163.10	-95.48	82.69	190.77	180.57	10.20	18.703		
1,600.00	1,595.32	1,572.52	1,562.30	5.63	5.63	168.06	-114.27	77.37	217.71	206.82	10.90	19.976		
1,700.00	1,694.47	1,667.27	1,655.01	6.03	6.07	171.93	-133.05	72.06	245.87	234.27	11.60	21.199		
1,800.00	1,793.62	1,762.01	1,747.72	6.43	6.50	175.01	-151.83	66.75	274.87	262.57	12.30	22.347		
1,900.00	1,892.78	1,856.75	1,840.43	6.83	6.95	177.51	-170.62	61.44	304.47	291.47	13.00	23.414		
2,000.00	1,991.93	1,951.49	1,933.14	7.23	7.40	179.57	-189.40	56.13	334.52	320.81	13.71	24.399		
2,100.00	2,091.08	2,046.23	2,025.85	7.63	7.85	-178.71	-208.19	50.82	364.89	350.47	14.42	25.307		
2,200.00	2,190.23	2,140.98	2,118.56	8.04	8.30	-177.25	-226.97	45.50	395.52	380.39	15.13	26.143		
2,300.00	2,289.38	2,235.72	2,211.27	8.44	8.76	-176.00	-245.75	40.19	426.36	410.51	15.84	26.915		
2,400.00	2,388.53	2,330.46	2,303.98	8.85	9.22	-174.91	-264.54	34.88	457.35	440.79	16.55	27.626		
2,500.00	2,487.68	2,425.20	2,396.69	9.25	9.68	-173.97	-283.32	29.57	488.47	471.20	17.27	28.284		
2,600.00	2,586.83	2,519.95	2,489.40	9.66	10.14	-173.14	-302.11	24.26	519.70	501.71	17.99	28.894		
2,700.00	2,685.99	2,614.69	2,582.10	10.07	10.61	-172.40	-320.89	18.95	551.02	532.31	18.70	29.460		
2,800.00	2,785.14	2,709.43	2,674.81	10.48	11.07	-171.74	-339.67	13.63	582.41	562.98	19.42	29.986		
2,900.00	2,884.29	2,804.17	2,767.52	10.89	11.54	-171.15	-358.46	8.32	613.86	593.72	20.14	30.476		
3,000.00	2,983.44	2,901.08	2,860.23	11.30	12.01	-170.61	-377.24	3.01	645.37	624.50	20.87	30.921		
3,100.00	3,082.59	3,006.34	2,952.94	11.71	12.53	-170.13	-396.02	-2.30	676.92	655.29	21.64	31.288		
3,200.00	3,181.74	3,088.40	3,045.65	12.12	12.94	-169.68	-414.81	-7.61	708.52	686.21	22.31	31.763		
3,300.00	3,280.89	3,183.14	3,138.36	12.53	13.41	-169.28	-433.59	-12.92	740.14	717.11	23.03	32.139		
3,400.00	3,380.04	3,277.88	3,231.07	12.94	13.88	-168.91	-452.38	-18.24	771.80	748.05	23.75	32.493		
3,500.00	3,479.20	3,372.63	3,323.78	13.35	14.35	-168.57	-471.16	-23.55	803.49	779.01	24.48	32.827		
3,600.00	3,578.35	3,467.37	3,416.49	13.76	14.82	-168.25	-489.94	-28.86	835.20	810.00	25.20	33.142		
3,700.00	3,677.50	3,562.11	3,509.20	14.17	15.29	-167.96	-508.73	-34.17	866.93	841.00	25.93	33.439		
3,800.00	3,776.65	3,656.85	3,601.91	14.58	15.76	-167.69	-527.51	-39.48	898.68	872.03	26.65	33.720		
3,900.00	3,875.80	3,751.60	3,694.62	14.99	16.23	-167.43	-546.30	-44.79	930.44	903.07	27.38	33.986		
4,000.00	3,974.95	3,846.34	3,787.33	15.41	16.71	-167.19	-565.08	-50.11	962.23	934.12	28.10	34.239		
4,100.00	4,074.10	3,941.08	3,880.04	15.82	17.18	-166.97	-583.86	-55.42	994.02	965.19	28.83	34.479		
4,200.00	4,173.25	4,035.82	3,972.75	16.23	17.65	-166.76	-602.65	-60.73	1,025.83	996.27	29.56	34.707		
4,300.00	4,272.40	4,130.57	4,065.46	16.64	18.12	-166.57	-621.43	-66.04	1,057.65	1,027.37	30.28	34.924		
4,400.00	4,371.56	4,225.31	4,158.17	17.06	18.60	-166.38	-640.21	-71.35	1,089.48	1,058.47	31.01	35.131		
4,500.00	4,470.71	4,320.05	4,250.88	17.47	19.07	-166.21	-659.00	-76.66	1,121.32	1,089.58	31.74	35.329		
4,600.00	4,569.86	4,414.79	4,343.59	17.88	19.55	-166.05	-677.78	-81.98	1,153.17	1,120.70	32.47	35.517		
4,700.00	4,669.01	4,509.53	4,436.30	18.29	20.02	-165.89	-696.57	-87.29	1,185.03	1,151.83	33.20	35.698		
4,800.00	4,768.16	4,604.28	4,529.00	18.71	20.49	-165.74	-715.35	-92.60	1,216.89	1,182.97	33.92	35.870		
4,900.00	4,867.31	4,700.98	4,621.71	19.12	20.98	-165.60	-734.13	-97.91	1,248.76	1,214.10	34.66	36.027		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 4-T4S-R65W - JAMASO 4-65 5-6-9 - ORIGINAL WELLBORE - PROPOSAL 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,966.46	4,806.24	4,714.42	19.53	21.50	-165.47	-752.92	-103.22	1,280.64	1,245.21	35.43	36.143		
5,100.00	5,065.61	4,888.50	4,807.13	19.95	21.92	-165.34	-771.70	-108.53	1,312.52	1,276.41	36.11	36.345		
5,200.00	5,164.77	4,983.25	4,899.84	20.36	22.39	-165.22	-790.49	-113.85	1,344.41	1,307.57	36.84	36.491		
5,300.00	5,263.92	5,077.99	4,992.55	20.77	22.87	-165.11	-809.27	-119.16	1,376.31	1,338.73	37.57	36.631		
5,400.00	5,363.07	5,172.73	5,085.26	21.18	23.34	-165.00	-828.05	-124.47	1,408.20	1,369.90	38.30	36.765		
5,500.00	5,462.22	5,267.47	5,177.97	21.60	23.82	-164.90	-846.84	-129.78	1,440.11	1,401.07	39.03	36.894		
5,600.00	5,561.37	5,362.21	5,270.68	22.01	24.29	-164.80	-865.62	-135.09	1,472.01	1,432.25	39.76	37.019		
5,700.00	5,660.52	5,456.96	5,363.39	22.43	24.77	-164.70	-884.41	-140.40	1,503.93	1,463.43	40.49	37.139		
5,800.00	5,759.67	5,551.70	5,456.10	22.84	25.24	-164.61	-903.19	-145.72	1,535.84	1,494.61	41.23	37.254		
5,900.00	5,858.82	5,646.44	5,548.81	23.25	25.72	-164.52	-921.97	-151.03	1,567.76	1,525.80	41.96	37.365		
6,000.00	5,957.97	5,741.18	5,641.52	23.67	26.19	-164.43	-940.76	-156.34	1,599.68	1,556.99	42.69	37.473		
6,100.00	6,057.13	5,835.93	5,734.23	24.08	26.67	-164.35	-959.54	-161.65	1,631.60	1,588.18	43.42	37.577		
6,200.00	6,156.28	5,930.67	5,826.94	24.49	27.14	-164.27	-978.32	-166.96	1,663.53	1,619.38	44.15	37.677		
6,300.00	6,255.43	6,025.41	5,919.65	24.91	27.62	-164.20	-997.11	-172.27	1,695.46	1,650.58	44.88	37.774		
6,400.00	6,354.58	6,120.15	6,012.36	25.32	28.10	-164.13	-1,015.89	-177.59	1,727.39	1,681.78	45.62	37.867		
6,500.00	6,453.73	6,214.90	6,105.07	25.73	28.57	-164.06	-1,034.68	-182.90	1,759.33	1,712.98	46.35	37.958		
6,600.00	6,552.88	6,309.64	6,197.78	26.15	29.05	-163.99	-1,053.46	-188.21	1,791.27	1,744.18	47.08	38.045		
6,700.00	6,652.03	6,404.38	6,290.49	26.56	29.52	-163.92	-1,072.24	-193.52	1,823.21	1,775.39	47.82	38.130		
6,800.00	6,751.18	6,500.88	6,383.19	26.98	30.01	-163.86	-1,091.03	-198.83	1,855.15	1,806.59	48.56	38.207		
6,900.00	6,850.34	6,606.14	6,475.90	27.39	30.54	-163.80	-1,109.81	-204.14	1,887.09	1,837.76	49.33	38.254		
7,000.00	6,949.49	6,701.37	6,581.12	27.80	31.01	-163.73	-1,131.06	-210.15	1,919.01	1,868.90	50.11	38.296		
7,011.14	6,960.53	6,731.29	6,610.46	27.85	31.16	-163.72	-1,136.65	-211.73	1,922.45	1,872.12	50.33	38.197		
7,100.00	7,048.80	6,977.34	6,853.78	28.21	32.23	-163.79	-1,171.37	-221.55	1,944.64	1,892.69	51.95	37.432		
7,200.00	7,148.46	7,265.75	7,141.65	28.58	33.19	-163.94	-1,186.33	-225.78	1,957.68	1,904.31	53.38	36.675		
7,300.00	7,248.35	7,372.44	7,248.20	28.94	33.48	-163.89	-1,186.33	-229.62	1,962.21	1,908.14	54.07	36.290		
7,384.67	7,333.00	7,454.46	7,328.70	29.21	33.73	-179.28	-1,186.27	-244.89	1,963.48	1,908.83	54.65	35.928		
7,400.00	7,348.33	7,468.76	7,342.48	29.26	33.78	-179.16	-1,186.25	-248.72	1,963.52	1,908.76	54.76	35.859		
7,414.67	7,363.00	7,482.25	7,353.39	29.31	33.82	-179.05	-1,186.23	-252.65	1,963.57	1,908.71	54.86	35.795		
7,450.00	7,398.31	7,514.25	7,385.61	29.42	33.93	-89.00	-1,186.19	-263.18	1,963.73	1,908.63	55.10	35.640		
7,500.00	7,448.02	7,558.72	7,426.52	29.58	34.08	-88.59	-1,186.11	-280.58	1,964.05	1,908.60	55.45	35.418		
7,550.00	7,497.08	7,602.31	7,465.19	29.75	34.24	-88.19	-1,186.02	-300.66	1,964.47	1,908.64	55.83	35.189		
7,600.00	7,545.12	7,645.11	7,501.58	29.93	34.40	-87.80	-1,185.93	-323.18	1,964.96	1,908.74	56.22	34.953		
7,650.00	7,591.77	7,687.20	7,535.62	30.11	34.56	-87.43	-1,185.82	-347.92	1,965.52	1,908.88	56.63	34.708		
7,700.00	7,636.69	7,728.65	7,567.28	30.30	34.73	-87.08	-1,185.70	-374.66	1,966.12	1,909.05	57.07	34.451		
7,750.00	7,679.52	7,769.54	7,596.54	30.49	34.89	-86.74	-1,185.58	-403.20	1,966.76	1,909.22	57.54	34.182		
7,800.00	7,719.94	7,809.92	7,623.37	30.70	35.07	-86.42	-1,185.45	-433.38	1,967.41	1,909.37	58.04	33.898		
7,850.00	7,757.65	7,850.00	7,647.83	30.91	35.25	-86.13	-1,185.31	-465.11	1,968.06	1,909.48	58.58	33.595		
7,900.00	7,792.35	7,889.40	7,669.65	31.14	35.44	-85.86	-1,185.16	-497.91	1,968.70	1,909.52	59.18	33.267		
7,950.00	7,823.79	7,928.61	7,689.08	31.39	35.65	-85.62	-1,185.02	-531.95	1,969.30	1,909.47	59.83	32.915		
8,000.00	7,851.72	7,967.52	7,706.02	31.67	35.86	-85.40	-1,184.86	-566.97	1,969.86	1,909.32	60.54	32.538		
8,050.00	7,875.93	8,006.18	7,720.45	31.99	36.09	-85.21	-1,184.71	-602.83	1,970.37	1,909.05	61.32	32.135		
8,100.00	7,896.23	8,044.63	7,732.38	32.35	36.34	-85.06	-1,184.55	-639.38	1,970.81	1,908.65	62.16	31.705		
8,150.00	7,912.48	8,082.92	7,741.80	32.75	36.61	-84.93	-1,184.38	-676.48	1,971.17	1,908.09	63.08	31.248		
8,200.00	7,924.55	8,121.08	7,748.69	33.20	36.90	-84.83	-1,184.22	-714.01	1,971.45	1,907.38	64.06	30.773		
8,250.00	7,932.35	8,159.15	7,753.07	33.70	37.21	-84.77	-1,184.06	-751.81	1,971.63	1,906.53	65.11	30.282		
8,300.00	7,935.81	8,197.16	7,754.93	34.24	37.54	-84.74	-1,183.89	-789.78	1,971.73	1,905.52	66.21	29.780		
8,314.73	7,936.00	8,209.05	7,755.00	34.41	37.65	-84.73	-1,183.84	-801.66	1,971.74	1,905.19	66.55	29.627		
8,400.00	7,936.00	8,305.69	7,755.00	35.44	38.64	-84.73	-1,183.47	-886.93	1,971.74	1,902.71	69.03	28.565		
8,500.00	7,936.00	8,405.69	7,755.00	36.82	39.82	-84.73	-1,183.03	-986.93	1,971.74	1,899.72	72.02	27.377		
8,600.00	7,936.00	8,505.69	7,755.00	38.34	41.18	-84.73	-1,182.59	-1,086.93	1,971.74	1,896.46	75.28	26.191		
8,700.00	7,936.00	8,605.69	7,755.00	39.99	42.68	-84.73	-1,182.16	-1,186.93	1,971.74	1,892.97	78.77	25.031		
8,800.00	7,936.00	8,705.69	7,755.00	41.75	44.33	-84.73	-1,181.72	-1,286.93	1,971.74	1,889.28	82.46	23.911		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,900.00	7,936.00	8,805.69	7,755.00	43.62	46.08	-84.73	-1,181.28	-1,386.92	1,971.74	1,885.41	86.33	22.840		
9,000.00	7,936.00	8,905.69	7,755.00	45.56	47.94	-84.73	-1,180.85	-1,486.92	1,971.74	1,881.39	90.35	21.823		
9,100.00	7,936.00	9,005.69	7,755.00	47.59	49.89	-84.73	-1,180.41	-1,586.92	1,971.74	1,877.24	94.50	20.864		
9,200.00	7,936.00	9,105.69	7,755.00	49.67	51.92	-84.73	-1,179.98	-1,686.92	1,971.75	1,872.97	98.77	19.963		
9,300.00	7,936.00	9,205.69	7,755.00	51.82	54.01	-84.73	-1,179.54	-1,786.92	1,971.75	1,868.60	103.14	19.116		
9,400.00	7,935.99	9,305.69	7,754.99	54.01	56.15	-84.73	-1,179.10	-1,886.92	1,971.75	1,864.14	107.60	18.324		
9,500.00	7,935.99	9,405.69	7,754.99	56.25	58.35	-84.73	-1,178.67	-1,986.92	1,971.75	1,859.60	112.14	17.582		
9,600.00	7,935.99	9,505.69	7,754.99	58.53	60.59	-84.73	-1,178.23	-2,086.92	1,971.75	1,854.99	116.75	16.888		
9,700.00	7,935.99	9,594.31	7,754.99	60.84	62.61	-84.73	-1,177.79	-2,186.92	1,971.75	1,850.59	121.16	16.274		
9,800.00	7,935.99	9,705.69	7,754.99	63.18	65.18	-84.73	-1,177.36	-2,286.92	1,971.75	1,845.60	126.15	15.630		
9,900.00	7,935.99	9,805.69	7,754.99	65.55	67.52	-84.73	-1,176.92	-2,386.91	1,971.75	1,840.82	130.93	15.060		
10,000.00	7,935.99	9,905.69	7,754.99	67.94	69.89	-84.73	-1,176.48	-2,486.91	1,971.75	1,836.01	135.75	14.525		
10,100.00	7,935.99	10,005.69	7,754.99	70.35	72.29	-84.73	-1,176.05	-2,586.91	1,971.75	1,831.15	140.61	14.023		
10,200.00	7,935.99	10,105.69	7,754.99	72.79	74.70	-84.73	-1,175.61	-2,686.91	1,971.75	1,826.26	145.50	13.552		
10,300.00	7,935.99	10,205.69	7,754.99	75.24	77.14	-84.73	-1,175.17	-2,786.91	1,971.76	1,821.33	150.42	13.108		
10,400.00	7,935.99	10,305.69	7,754.99	77.70	79.59	-84.73	-1,174.74	-2,886.91	1,971.76	1,816.38	155.38	12.690		
10,500.00	7,935.99	10,405.69	7,754.99	80.19	82.06	-84.73	-1,174.30	-2,986.91	1,971.76	1,811.40	160.36	12.296		
10,600.00	7,935.99	10,505.69	7,754.99	82.68	84.54	-84.73	-1,173.87	-3,086.91	1,971.76	1,806.39	165.36	11.924		
10,700.00	7,935.99	10,605.69	7,754.99	85.19	87.03	-84.73	-1,173.43	-3,186.91	1,971.76	1,801.37	170.39	11.572		
10,800.00	7,935.99	10,705.69	7,754.99	87.70	89.54	-84.73	-1,172.99	-3,286.91	1,971.76	1,796.32	175.44	11.239		
10,900.00	7,935.99	10,805.69	7,754.99	90.23	92.06	-84.73	-1,172.56	-3,386.91	1,971.76	1,791.26	180.50	10.924		
11,000.00	7,935.99	10,905.69	7,754.99	92.77	94.59	-84.73	-1,172.12	-3,486.90	1,971.76	1,786.18	185.58	10.625		
11,100.00	7,935.99	11,005.69	7,754.99	95.31	97.13	-84.73	-1,171.68	-3,586.90	1,971.76	1,781.09	190.68	10.341		
11,200.00	7,935.99	11,105.69	7,754.99	97.87	99.67	-84.73	-1,171.25	-3,686.90	1,971.76	1,775.98	195.79	10.071		
11,300.00	7,935.99	11,205.69	7,754.99	100.43	102.22	-84.73	-1,170.81	-3,786.90	1,971.76	1,770.85	200.91	9.814		
11,400.00	7,935.99	11,305.69	7,754.99	102.99	104.79	-84.73	-1,170.37	-3,886.90	1,971.76	1,765.72	206.05	9.570		
11,500.00	7,935.98	11,405.69	7,754.98	105.57	107.35	-84.73	-1,169.94	-3,986.90	1,971.77	1,760.57	211.19	9.336		
11,600.00	7,935.98	11,505.69	7,754.98	108.15	109.93	-84.73	-1,169.50	-4,086.90	1,971.77	1,755.42	216.35	9.114		
11,700.00	7,935.98	11,605.69	7,754.98	110.73	112.51	-84.73	-1,169.07	-4,186.90	1,971.77	1,750.25	221.52	8.901		
11,800.00	7,935.98	11,705.69	7,754.98	113.32	115.09	-84.73	-1,168.63	-4,286.90	1,971.77	1,745.08	226.69	8.698		
11,900.00	7,935.98	11,805.69	7,754.98	115.91	117.68	-84.73	-1,168.19	-4,386.90	1,971.77	1,739.89	231.88	8.504		
12,000.00	7,935.98	11,905.69	7,754.98	118.51	120.27	-84.73	-1,167.76	-4,486.89	1,971.77	1,734.70	237.07	8.317		
12,100.00	7,935.98	12,005.69	7,754.98	121.11	122.87	-84.73	-1,167.32	-4,586.89	1,971.77	1,729.50	242.27	8.139		
12,200.00	7,935.98	12,105.69	7,754.98	123.72	125.48	-84.73	-1,166.88	-4,686.89	1,971.77	1,724.30	247.48	7.968		
12,300.00	7,935.98	12,205.69	7,754.98	126.33	128.08	-84.73	-1,166.45	-4,786.89	1,971.77	1,719.08	252.69	7.803		
12,400.00	7,935.98	12,294.31	7,754.98	128.94	130.40	-84.73	-1,166.01	-4,886.89	1,971.77	1,714.16	257.61	7.654		
12,500.00	7,935.98	12,405.69	7,754.98	131.56	133.31	-84.73	-1,165.57	-4,986.89	1,971.77	1,708.64	263.13	7.493		
12,600.00	7,935.98	12,505.69	7,754.98	134.17	135.92	-84.73	-1,165.14	-5,086.89	1,971.78	1,703.41	268.36	7.347		
12,700.00	7,935.98	12,605.69	7,754.98	136.80	138.54	-84.73	-1,164.70	-5,186.89	1,971.78	1,698.18	273.60	7.207		
12,800.00	7,935.98	12,705.69	7,754.98	139.42	141.17	-84.73	-1,164.27	-5,286.89	1,971.78	1,692.94	278.84	7.071		
12,900.00	7,935.98	12,805.69	7,754.98	142.05	143.79	-84.73	-1,163.83	-5,386.89	1,971.78	1,687.70	284.08	6.941		
13,000.00	7,935.98	12,905.69	7,754.98	144.68	146.42	-84.73	-1,163.39	-5,486.89	1,971.78	1,682.45	289.33	6.815		
13,100.00	7,935.98	13,005.69	7,754.98	147.31	149.05	-84.73	-1,162.96	-5,586.88	1,971.78	1,677.20	294.58	6.693		
13,200.00	7,935.98	13,105.69	7,754.98	149.94	151.68	-84.73	-1,162.52	-5,686.88	1,971.78	1,671.94	299.84	6.576		
13,300.00	7,935.98	13,205.69	7,754.98	152.57	154.31	-84.73	-1,162.08	-5,786.88	1,971.78	1,666.68	305.10	6.463		
13,400.00	7,935.98	13,305.69	7,754.98	155.21	156.95	-84.73	-1,161.65	-5,886.88	1,971.78	1,661.42	310.36	6.353		
13,500.00	7,935.97	13,394.31	7,754.98	157.85	159.29	-84.73	-1,161.21	-5,986.88	1,971.78	1,656.45	315.33	6.253		
13,600.00	7,935.97	13,505.69	7,754.97	160.49	162.23	-84.73	-1,160.77	-6,086.88	1,971.78	1,650.88	320.90	6.145		
13,700.00	7,935.97	13,594.31	7,754.97	163.13	164.57	-84.73	-1,160.34	-6,186.88	1,971.78	1,645.91	325.87	6.051		
13,800.00	7,935.97	13,705.69	7,754.97	165.78	167.52	-84.73	-1,159.90	-6,286.88	1,971.79	1,640.34	331.45	5.949		
13,900.00	7,935.97	13,805.69	7,754.97	168.42	170.16	-84.73	-1,159.46	-6,386.88	1,971.79	1,635.06	336.73	5.856		
14,000.00	7,935.97	13,894.31	7,754.97	171.07	172.51	-84.73	-1,159.03	-6,486.88	1,971.79	1,630.08	341.71	5.770		

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

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.00	7,935.97	14,005.69	7,754.97	173.72	175.46	-84.73	-1,158.59	-6,586.87	1,971.79	1,624.50	347.29	5.678		
14,200.00	7,935.97	14,105.69	7,754.97	176.36	178.11	-84.73	-1,158.16	-6,686.87	1,971.79	1,619.21	352.58	5.592		
14,300.00	7,935.97	14,205.69	7,754.97	179.02	180.76	-84.73	-1,157.72	-6,786.87	1,971.79	1,613.92	357.87	5.510		
14,400.00	7,935.97	14,305.69	7,754.97	181.67	183.41	-84.73	-1,157.28	-6,886.87	1,971.79	1,608.63	363.16	5.430		
14,500.00	7,935.97	14,405.69	7,754.97	184.32	186.06	-84.73	-1,156.85	-6,986.87	1,971.79	1,603.34	368.45	5.352		
14,600.00	7,935.97	14,505.69	7,754.97	186.97	188.72	-84.73	-1,156.41	-7,086.87	1,971.79	1,598.05	373.74	5.276		
14,700.00	7,935.97	14,605.69	7,754.97	189.63	191.37	-84.73	-1,155.97	-7,186.87	1,971.79	1,592.75	379.04	5.202		
14,800.00	7,935.97	14,705.69	7,754.97	192.28	194.03	-84.73	-1,155.54	-7,286.87	1,971.79	1,587.46	384.34	5.130		
14,900.00	7,935.97	14,805.69	7,754.97	194.94	196.69	-84.73	-1,155.10	-7,386.87	1,971.80	1,582.16	389.64	5.061		
15,000.00	7,935.97	14,905.69	7,754.97	197.60	199.34	-84.73	-1,154.66	-7,486.87	1,971.80	1,576.86	394.94	4.993		
15,100.00	7,935.97	15,005.69	7,754.97	200.26	202.00	-84.73	-1,154.23	-7,586.87	1,971.80	1,571.55	400.24	4.927		
15,200.00	7,935.97	15,105.69	7,754.97	202.91	204.66	-84.73	-1,153.79	-7,686.86	1,971.80	1,566.25	405.55	4.862		
15,300.00	7,935.97	15,205.69	7,754.97	205.57	207.33	-84.73	-1,153.36	-7,786.86	1,971.80	1,560.95	410.85	4.799		
15,400.00	7,935.97	15,305.69	7,754.97	208.24	209.99	-84.73	-1,152.92	-7,886.86	1,971.80	1,555.64	416.16	4.738		
15,500.00	7,935.97	15,405.69	7,754.97	210.90	212.65	-84.73	-1,152.48	-7,986.86	1,971.80	1,550.33	421.47	4.678		
15,600.00	7,935.96	15,505.69	7,754.96	213.56	215.31	-84.73	-1,152.05	-8,086.86	1,971.80	1,545.02	426.78	4.620		
15,700.00	7,935.96	15,605.69	7,754.96	216.22	217.98	-84.73	-1,151.61	-8,186.86	1,971.80	1,539.71	432.09	4.563		
15,800.00	7,935.96	15,705.69	7,754.96	218.89	220.64	-84.73	-1,151.17	-8,286.86	1,971.80	1,534.40	437.40	4.508		
15,900.00	7,935.96	15,805.69	7,754.96	221.55	223.31	-84.73	-1,150.74	-8,386.86	1,971.80	1,529.09	442.72	4.454		
16,000.00	7,935.96	15,905.69	7,754.96	224.21	225.98	-84.73	-1,150.30	-8,486.86	1,971.80	1,523.77	448.03	4.401		
16,100.00	7,935.96	16,005.69	7,754.96	226.88	228.64	-84.73	-1,149.86	-8,586.86	1,971.81	1,518.46	453.35	4.349		
16,200.00	7,935.96	16,105.69	7,754.96	229.55	231.31	-84.73	-1,149.43	-8,686.85	1,971.81	1,513.14	458.66	4.299		
16,300.00	7,935.96	16,205.69	7,754.96	232.21	233.98	-84.73	-1,148.99	-8,786.85	1,971.81	1,507.82	463.98	4.250		
16,400.00	7,935.96	16,305.69	7,754.96	234.88	236.65	-84.73	-1,148.56	-8,886.85	1,971.81	1,502.51	469.30	4.202		
16,500.00	7,935.96	16,405.69	7,754.96	237.55	239.32	-84.73	-1,148.12	-8,986.85	1,971.81	1,497.19	474.62	4.154		
16,600.00	7,935.96	16,505.69	7,754.96	240.21	241.99	-84.73	-1,147.68	-9,086.85	1,971.81	1,491.87	479.94	4.108		
16,700.00	7,935.96	16,605.69	7,754.96	242.88	244.66	-84.73	-1,147.25	-9,186.85	1,971.81	1,486.55	485.26	4.063		
16,800.00	7,935.96	16,694.31	7,754.96	245.55	247.02	-84.73	-1,146.81	-9,286.85	1,971.81	1,481.53	490.28	4.022		
16,900.00	7,935.96	16,805.69	7,754.96	248.22	250.00	-84.73	-1,146.37	-9,386.85	1,971.81	1,476.50	495.91	3.976		
17,000.00	7,935.96	16,905.69	7,754.96	250.89	252.67	-84.73	-1,145.94	-9,486.85	1,971.81	1,470.58	501.23	3.934		
17,100.00	7,935.96	17,005.69	7,754.96	253.56	255.34	-84.73	-1,145.50	-9,586.85	1,971.81	1,465.25	506.56	3.893		
17,200.00	7,935.96	17,105.69	7,754.96	256.23	258.02	-84.73	-1,145.06	-9,686.85	1,971.82	1,459.93	511.89	3.852		
17,300.00	7,935.96	17,205.69	7,754.96	258.90	260.69	-84.73	-1,144.63	-9,786.84	1,971.82	1,454.60	517.21	3.812		
17,400.00	7,935.96	17,305.69	7,754.96	261.58	263.36	-84.73	-1,144.19	-9,886.84	1,971.82	1,449.28	522.54	3.774		
17,500.00	7,935.96	17,405.69	7,754.96	264.25	266.04	-84.73	-1,143.75	-9,986.84	1,971.82	1,443.95	527.87	3.735		
17,600.00	7,935.96	17,505.69	7,754.96	266.92	268.71	-84.73	-1,143.32	-10,086.84	1,971.82	1,438.62	533.20	3.698		
17,700.00	7,935.95	17,605.69	7,754.95	269.59	271.39	-84.73	-1,142.88	-10,186.84	1,971.82	1,433.29	538.52	3.662		
17,800.00	7,935.95	17,705.69	7,754.95	272.26	274.06	-84.73	-1,142.45	-10,286.84	1,971.82	1,427.97	543.85	3.626		
17,900.00	7,935.95	17,794.31	7,754.95	274.94	276.43	-84.73	-1,142.01	-10,386.84	1,971.82	1,422.94	548.88	3.592		
17,997.91	7,936.00	17,892.32	7,755.00	277.56	279.05	-84.73	-1,141.58	-10,484.85	1,971.74	1,417.63	554.10	3.558 SF		

Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB 25' @ 5610.00usft

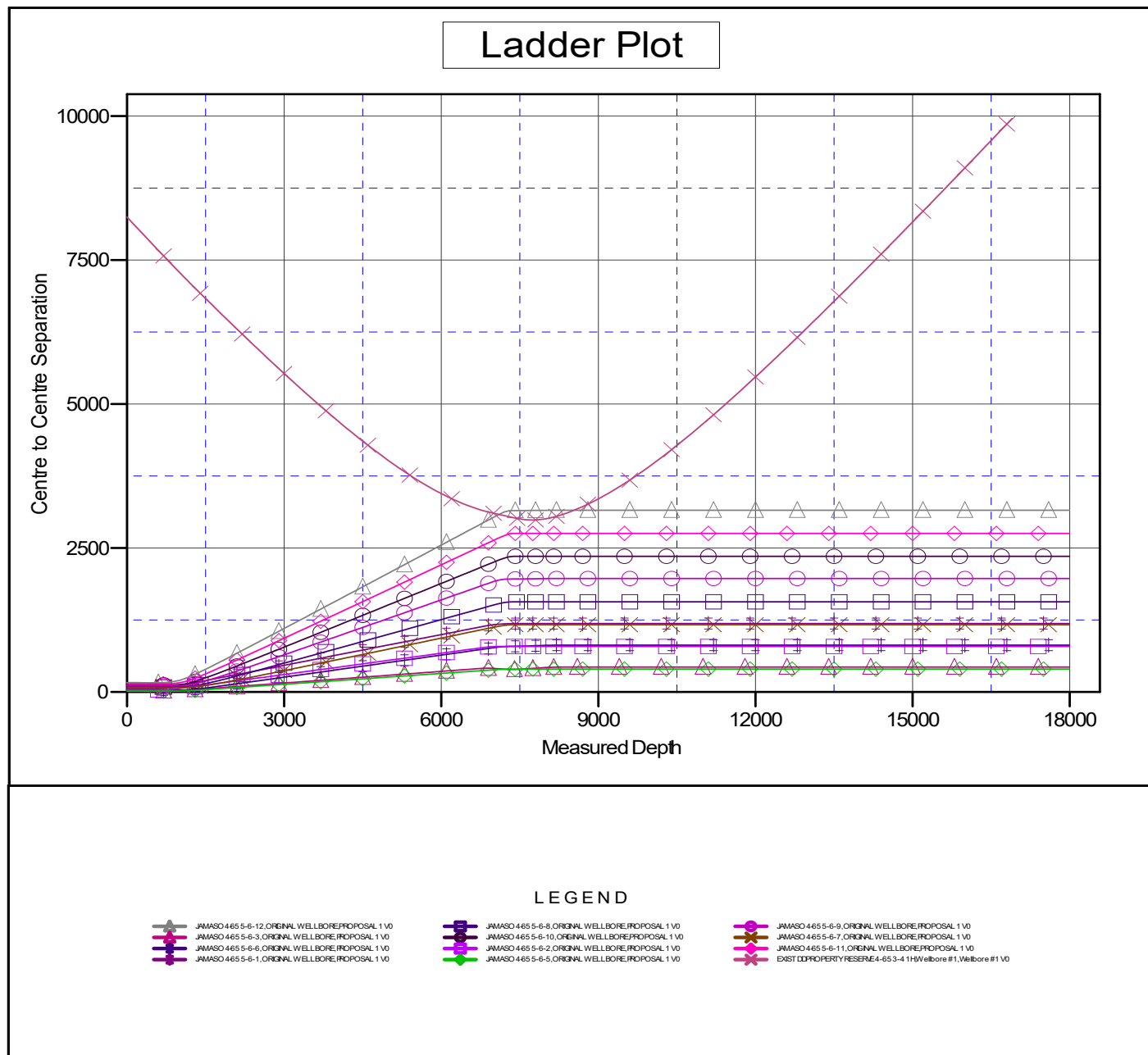
Offset Depths are relative to Offset Datum

Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: JAMASO 4-65 5-6-4

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.53°



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

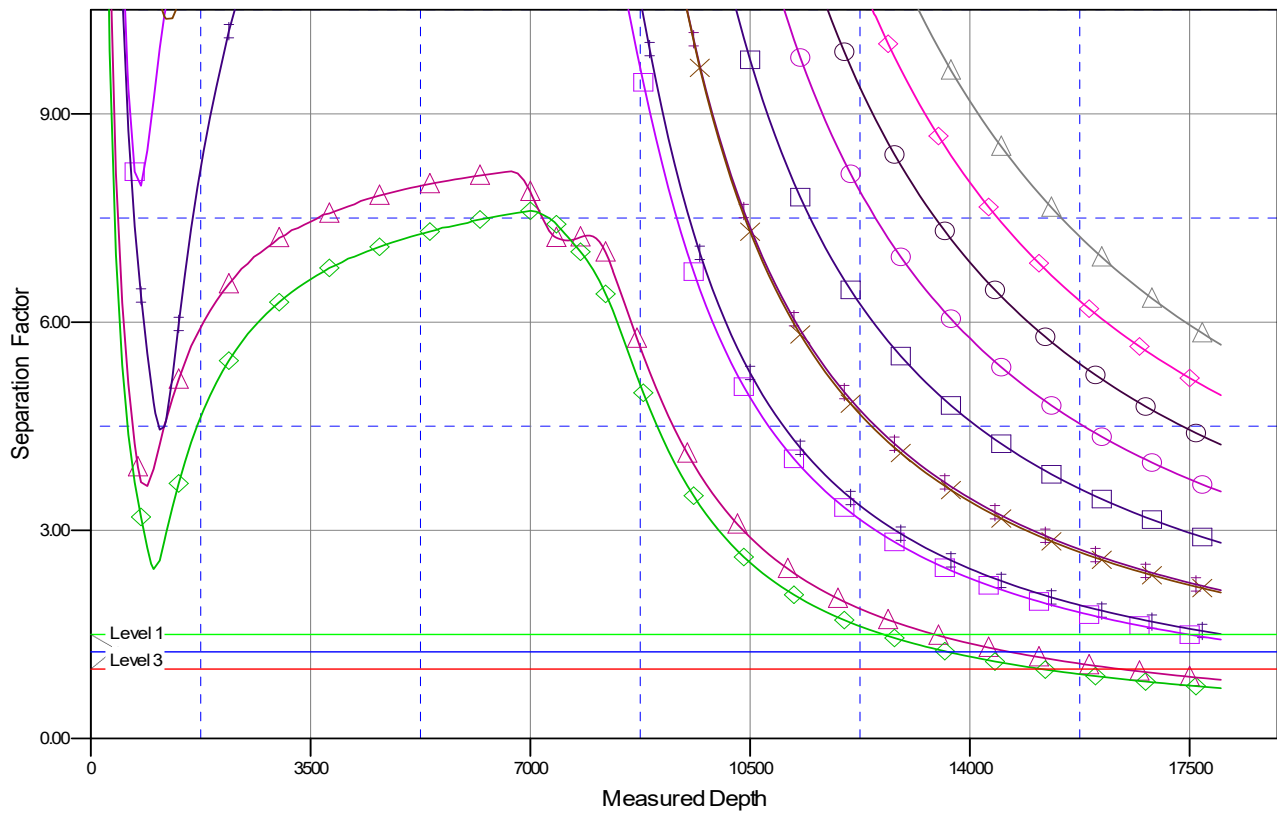
Anticollision Report

Company:	AXIS EXPLORATION	Local Co-ordinate Reference:	Well JAMASO 4-65 5-6-4
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5610.00usft
Reference Site:	Sec 4-T4S-R65W	MD Reference:	KB 25' @ 5610.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	JAMASO 4-65 5-6-4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDT_32Bit_ODBC
Reference Design:	PROPOSAL 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB 25' @ 5610.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: JAMASO 4-65 5-6-4
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.53°

Separation Factor Plot



LEGEND

JAMASO 4-65 5-6-12, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-8, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-9, ORIGINAL WELLBORE, PROPOSAL 1 V0
JAMASO 4-65 5-6-3, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-10, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-7, ORIGINAL WELLBORE, PROPOSAL 1 V0
JAMASO 4-65 5-6-6, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-2, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-11, ORIGINAL WELLBORE, PROPOSAL 1 V0
JAMASO 4-65 5-6-1, ORIGINAL WELLBORE, PROPOSAL 1 V0	JAMASO 4-65 5-6-5, ORIGINAL WELLBORE, PROPOSAL 1 V0	EXIST CD PROPERTY RESERVE 4-65 3-4 1H Wellbore #1, Wellbore #1 V0