



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Driver 14 State

#502H

OH

Survey: Crescent MWD #1

EOG PVA

13 June, 2016

Pending BLM approvals will
subsequently be reviewed
and scanned

HOBBBS OCD
NOV 04 2016
RECEIVED

30-025-43071



EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #502H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Site:	Driver 14 State	MD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Well:	#502H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Driver 14 State		
Site Position:		Northing:	477,891.00 usft
From:	Map	Easting:	742,708.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 18' 41.017 N
		Longitude:	103° 32' 51.846 W
		Grid Convergence:	0.42 °

Well	#502H					
Well Position	+N/-S	0.0 usft	Northing:	477,891.00 usft	Latitude:	32° 18' 41.017 N
	+E/-W	0.0 usft	Easting:	742,708.00 usft	Longitude:	103° 32' 51.846 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level:	3,625.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/27/2016	7.06	60.16	48,100

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	184.24



EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #502H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Site:	Driver 14 State	MD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Well:	#502H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey Program		Date 6/13/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	1,210.0	Gyro #1 (OH)	NSG-CT_WL	Continuous north-seeking gyro on wireline	
1,355.0	15,960.0	Crescent MWD #1 (OH)	MWD	MWD - Standard	

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
1,210.0	0.50	6.45	1,210.0	3.3	1.6	0.00	0.00	0.00	-3.4	-1.2	
1,355.0	0.79	97.32	1,355.0	3.8	2.7	0.65	0.20	62.67	-2.2	4.1	
1,547.0	1.49	292.44	1,547.0	4.6	1.7	1.18	0.36	-85.87	0.9	-5.0	
1,738.0	2.29	285.41	1,737.9	6.5	-4.3	0.44	0.42	-3.68	0.1	-5.2	
1,929.0	3.52	289.89	1,928.6	9.5	-13.5	0.65	0.64	2.35	-1.4	-5.7	
2,121.0	3.61	290.86	2,120.2	13.7	-24.7	0.06	0.05	0.51	-0.9	-6.9	
2,312.0	4.84	285.32	2,310.7	18.0	-38.1	0.68	0.64	-2.90	0.1	-7.7	
2,504.0	4.04	283.03	2,502.1	21.6	-52.5	0.43	-0.42	-1.19	0.0	-7.6	
2,695.0	4.31	282.68	2,692.6	24.7	-66.0	0.14	0.14	-0.18	0.4	-7.1	
2,886.0	4.22	283.39	2,883.1	27.9	-79.9	0.05	-0.05	0.37	0.5	-6.6	
3,077.0	4.48	286.37	3,073.6	31.7	-93.9	0.18	0.14	1.56	0.0	-6.7	
3,269.0	4.13	289.71	3,265.0	36.1	-107.6	0.22	-0.18	1.74	-0.4	-7.5	
3,461.0	4.66	282.86	3,456.4	40.2	-121.7	0.39	0.28	-3.57	0.3	-7.8	
3,651.0	5.01	280.49	3,645.8	43.4	-137.4	0.21	0.18	-1.25	-1.2	-7.1	
3,843.0	5.01	278.73	3,837.0	46.2	-153.9	0.08	0.00	-0.92	-3.4	-5.8	
4,035.0	4.04	284.09	4,028.4	49.1	-168.7	0.55	-0.51	2.79	-4.6	-4.6	
4,226.0	5.10	302.81	4,218.8	55.4	-182.4	0.95	0.55	9.80	-7.0	-5.1	
4,418.0	4.75	290.59	4,410.1	62.8	-197.0	0.57	-0.18	-6.36	-7.7	-9.8	
4,609.0	3.61	300.26	4,600.6	68.6	-209.6	0.70	-0.60	5.06	-9.2	-10.8	
4,802.0	5.01	272.66	4,793.1	72.0	-223.3	1.28	0.73	-14.30	-2.8	-13.7	
4,994.0	5.10	275.56	4,984.4	73.3	-240.2	0.14	0.05	1.51	-6.2	-10.8	



EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #502H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Site:	Driver 14 State	MD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Well:	#502H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
5,056.0	5.54	278.11	5,046.1	73.9	-245.9	0.81	0.71	4.11	-7.8	-9.8	
5,188.0	5.01	280.31	5,177.5	75.9	-257.8	0.43	-0.40	1.67	-10.4	-8.5	
5,380.0	6.51	287.43	5,368.6	80.6	-276.5	0.86	0.78	3.71	-16.2	-6.8	
5,571.0	6.68	283.65	5,558.3	86.5	-297.6	0.24	0.09	-1.98	-23.3	-8.3	
5,762.0	6.24	282.07	5,748.1	91.3	-318.5	0.25	-0.23	-0.83	-30.2	-8.5	
5,954.0	5.80	282.51	5,939.0	95.6	-338.2	0.23	-0.23	0.23	-36.0	-7.7	
6,146.0	4.92	282.77	6,130.2	99.5	-355.7	0.46	-0.46	0.14	-39.6	-6.9	
6,337.0	4.48	283.82	6,320.5	103.1	-371.0	0.23	-0.23	0.55	-41.0	-5.8	
6,529.0	4.13	285.49	6,512.0	106.7	-384.9	0.19	-0.18	0.87	-41.1	-4.6	
6,721.0	3.69	285.23	6,703.5	110.2	-397.5	0.23	-0.23	-0.14	-39.8	-4.9	
6,912.0	2.73	277.32	6,894.2	112.4	-408.0	0.55	-0.50	-4.14	-35.1	-9.3	
7,104.0	1.32	312.04	7,086.1	114.5	-414.1	0.94	-0.73	18.08	-27.5	8.3	
7,296.0	1.32	305.18	7,278.1	117.2	-417.6	0.08	0.00	-3.57	-23.4	1.3	
7,488.0	0.88	322.94	7,470.0	119.7	-420.3	0.29	-0.23	9.25	-22.8	7.0	
7,680.0	0.79	312.92	7,662.0	121.7	-422.1	0.09	-0.05	-5.22	-26.4	2.6	
7,872.0	0.26	125.01	7,854.0	122.4	-422.8	0.55	-0.28	89.63	27.4	1.2	
8,064.0	0.62	148.91	8,046.0	121.3	-421.9	0.21	0.19	12.45	24.1	-9.8	
8,256.0	0.44	144.61	8,238.0	119.8	-420.9	0.10	-0.09	-2.24	23.0	-8.1	
8,449.0	0.44	142.67	8,431.0	118.6	-420.0	0.01	0.00	-1.01	21.8	-7.3	
8,641.0	0.53	133.27	8,623.0	117.4	-418.9	0.06	0.05	-4.90	21.1	-3.8	
8,833.0	0.79	120.17	8,815.0	116.1	-417.1	0.16	0.14	-6.82	19.2	0.9	
9,025.0	0.53	160.34	9,007.0	114.6	-415.7	0.27	-0.14	20.92	13.3	-10.8	
9,217.0	0.35	211.40	9,199.0	113.3	-415.7	0.21	-0.09	26.59	-1.2	-16.5	
9,408.0	0.62	289.89	9,390.0	113.1	-417.0	0.34	0.14	41.09	-17.6	-1.6	
9,600.0	0.35	308.43	9,581.9	113.8	-418.4	0.16	-0.14	9.66	-18.7	4.4	
9,792.0	0.70	287.69	9,773.9	114.6	-420.0	0.20	0.18	-10.80	-20.8	-2.7	
9,985.0	2.20	328.91	9,966.9	118.1	-423.0	0.90	0.78	21.36	-22.0	12.5	



EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #502H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Site:	Driver 14 State	MD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Well:	#502H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,177.0	1.67	297.62	10,158.8	122.5	-427.4	0.60	-0.28	-16.30	-31.2	-2.7	
10,307.0	1.67	166.05	10,288.7	121.6	-428.6	2.34	0.00	-101.21	22.1	-23.0	
10,499.0	0.97	202.00	10,480.7	117.4	-428.6	0.55	-0.36	18.72	0.5	-29.9	
10,595.0	0.70	252.80	10,576.7	116.4	-429.4	0.79	-0.28	52.92	-24.0	-18.7	
10,602.6	0.80	230.64	10,584.3	116.4	-429.5	4.00	1.34	-289.87	-15.3	-26.4	
Plan @ 10584.2 (#502H OH Plan #3)											
10,692.0	4.04	180.82	10,673.6	112.8	-430.0	4.00	3.62	-55.76	6.7	-29.1	
10,740.0	10.29	158.93	10,721.2	107.1	-428.5	13.98	13.02	-45.60	11.6	-25.0	
10,788.0	16.27	160.51	10,767.9	96.8	-424.7	12.48	12.46	3.29	4.0	-23.8	
10,836.0	22.42	171.32	10,813.2	81.4	-421.1	14.78	12.81	22.52	-7.1	-21.5	
10,884.0	26.38	179.41	10,856.9	61.7	-419.6	10.78	8.25	16.85	-15.9	-19.0	
10,932.0	30.07	179.41	10,899.2	39.0	-419.4	7.69	7.69	0.00	-20.4	-19.0	
10,980.0	34.82	175.98	10,939.7	13.3	-418.3	10.61	9.90	-7.15	-22.3	-19.2	
11,028.0	39.13	174.31	10,978.0	-15.5	-415.8	9.22	8.98	-3.48	-23.7	-17.5	
11,076.0	43.88	173.61	11,014.0	-47.1	-412.5	9.94	9.90	-1.46	-24.1	-14.5	
11,124.0	50.03	175.72	11,046.7	-82.0	-409.3	13.21	12.81	4.40	-24.4	-10.7	
11,172.0	55.75	175.98	11,075.7	-120.2	-406.5	11.92	11.92	0.54	-24.3	-8.0	
11,221.0	63.84	178.36	11,100.3	-162.5	-404.4	17.03	16.51	4.86	-24.9	-5.7	
11,232.2	65.34	178.76	11,105.1	-172.6	-404.2	13.75	13.36	3.61	-25.2	-5.5	
HL Crossing.11232.2' MD; 11105.1' TVD; -172.6'; -404.2'; 65.34											
11,259.3	68.96	179.70	11,115.6	-197.5	-403.8	13.75	13.38	3.47	-26.0	-5.1	
FTP(driver 14 ST #502H)											
11,269.0	70.26	180.03	11,119.0	-206.6	-403.8	13.75	13.39	3.35	-26.3	-5.1	
11,317.0	74.22	179.76	11,133.6	-252.3	-403.7	8.27	8.25	-0.56	-26.8	-5.4	
11,365.0	78.44	180.20	11,145.0	-299.0	-403.7	8.84	8.79	0.92	-25.7	-5.8	
11,413.0	78.96	179.94	11,154.4	-346.0	-403.8	1.21	1.08	-0.54	-21.4	-6.3	
11,461.0	80.64	180.03	11,162.9	-393.3	-403.8	3.50	3.50	0.19	-13.5	-6.6	



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Driver 14 State
Well: #502H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25 @ 3650.0usft (H&P 651)
MD Reference: KB = 25 @ 3650.0usft (H&P 651)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
11,508.0	81.43	180.11	11,170.2	-439.7	-403.8	1.69	1.68	0.17	-5.8	-7.0	
11,530.0	81.60	179.76	11,173.5	-461.5	-403.8	1.75	0.77	-1.59	-2.5	-7.1	
11,556.0	83.89	178.88	11,176.7	-487.2	-403.5	9.43	8.81	-3.38	1.0	-7.0	
11,653.0	87.93	178.62	11,183.7	-584.0	-401.4	4.17	4.16	-0.27	8.6	-5.6	
11,749.0	89.43	178.18	11,185.9	-679.9	-398.7	1.63	1.56	-0.46	11.5	-3.7	
11,845.0	92.68	178.27	11,184.1	-775.8	-395.7	3.39	3.39	0.09	10.4	-1.4	
11,941.0	94.70	177.21	11,177.9	-871.5	-392.0	2.38	2.10	-1.10	5.0	1.6	
12,037.0	92.59	176.69	11,171.8	-967.2	-386.9	2.26	-2.20	-0.54	-0.4	6.0	
12,133.0	90.57	178.27	11,169.2	-1,063.1	-382.6	2.67	-2.10	1.65	-2.4	9.5	
12,229.0	88.02	179.06	11,170.4	-1,159.0	-380.4	2.78	-2.66	0.82	-0.5	11.0	
12,325.0	87.14	179.41	11,174.4	-1,254.9	-379.1	0.99	-0.92	0.36	4.2	11.5	
12,421.0	88.72	179.41	11,177.9	-1,350.9	-378.1	1.65	1.65	0.00	8.4	11.8	
12,517.0	90.84	178.88	11,178.2	-1,446.8	-376.7	2.28	2.21	-0.55	9.4	12.5	
12,614.0	92.15	178.09	11,175.7	-1,543.8	-374.1	1.58	1.35	-0.81	7.6	14.3	
12,710.0	90.22	179.67	11,173.7	-1,639.7	-372.3	2.60	-2.01	1.65	6.3	15.5	
12,806.0	89.96	180.38	11,173.6	-1,735.7	-372.3	0.79	-0.27	0.74	6.8	14.7	
12,902.0	91.10	179.94	11,172.7	-1,831.7	-372.6	1.27	1.19	-0.46	6.6	13.7	
12,997.0	88.20	180.03	11,173.3	-1,926.7	-372.6	3.05	-3.05	0.09	7.9	13.0	
13,047.1	89.12	179.98	11,174.4	-1,976.7	-372.6	1.84	1.83	-0.09	9.4	12.6	
TGT#1 (driver 14 ST #502H)											
13,093.0	89.96	179.94	11,174.8	-2,022.7	-372.5	1.84	1.83	-0.09	10.3	12.3	
13,189.0	91.01	179.67	11,174.0	-2,118.7	-372.2	1.13	1.09	-0.28	10.4	11.9	
13,285.0	90.04	179.32	11,173.1	-2,214.7	-371.4	1.07	-1.01	-0.36	10.5	12.0	
13,382.0	90.31	178.88	11,172.8	-2,311.7	-369.8	0.53	0.28	-0.45	11.2	12.8	
13,478.0	92.07	178.80	11,170.8	-2,407.6	-367.9	1.84	1.83	-0.08	10.1	14.0	
13,487.9	91.99	178.79	11,170.5	-2,417.5	-367.7	0.83	-0.82	-0.09	9.9	14.1	
TGT#1(driver 14 ST #502H)											



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Driver 14 State
Well: #502H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25 @ 3650.0usft (H&P 651)
MD Reference: KB = 25 @ 3650.0usft (H&P 651)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,574.0	91.28	178.71	11,168.0	-2,503.5	-365.8	0.83	-0.82	-0.09	8.3	15.4	
13,670.0	88.90	179.24	11,167.9	-2,599.5	-364.1	2.54	-2.48	0.55	9.1	16.3	
13,766.0	89.52	178.97	11,169.2	-2,695.5	-362.6	0.70	0.65	-0.28	11.4	17.1	
13,862.0	90.66	178.80	11,169.0	-2,791.5	-360.7	1.20	1.19	-0.18	12.2	18.2	
13,958.0	91.45	178.62	11,167.3	-2,887.4	-358.6	0.84	0.82	-0.19	11.4	19.7	
14,050.5	90.10	179.21	11,166.0	-2,980.0	-356.8	1.59	-1.45	0.64	11.0	20.7	
TGT#2 (driver 14 ST #502H)											
14,055.0	90.04	179.24	11,166.0	-2,984.4	-356.7	1.59	-1.45	0.64	11.1	20.8	
14,151.0	91.10	179.06	11,165.1	-3,080.4	-355.3	1.12	1.10	-0.19	10.4	21.5	
14,247.0	90.66	180.55	11,163.6	-3,176.4	-355.0	1.62	-0.46	1.55	9.2	21.0	
14,343.0	91.71	180.20	11,161.6	-3,272.4	-355.6	1.15	1.09	-0.36	7.4	19.7	
14,439.0	89.78	180.29	11,160.4	-3,368.3	-356.0	2.01	-2.01	0.09	6.4	18.5	
14,536.0	91.45	180.20	11,159.3	-3,465.3	-356.4	1.72	1.72	-0.09	5.6	17.4	
14,632.0	89.25	180.29	11,158.7	-3,561.3	-356.9	2.29	-2.29	0.09	5.3	16.3	
14,728.0	89.34	180.11	11,159.9	-3,657.3	-357.2	0.21	0.09	-0.19	6.7	15.2	
14,823.0	90.31	179.67	11,160.2	-3,752.3	-357.0	1.12	1.02	-0.46	7.3	14.7	
14,920.0	91.54	179.15	11,158.6	-3,849.3	-356.0	1.38	1.27	-0.54	5.9	14.9	
15,016.0	90.75	179.24	11,156.7	-3,945.3	-354.7	0.83	-0.82	0.09	4.3	15.5	
15,113.0	90.22	180.47	11,155.9	-4,042.3	-354.4	1.38	-0.55	1.27	3.7	15.0	
15,209.0	88.46	180.47	11,157.0	-4,138.2	-355.2	1.83	-1.83	0.00	5.1	13.5	
15,305.0	89.34	179.94	11,158.8	-4,234.2	-355.6	1.07	0.92	-0.55	7.1	12.4	
15,402.0	89.60	179.15	11,159.7	-4,331.2	-354.8	0.86	0.27	-0.81	8.3	12.5	
15,498.0	90.75	178.27	11,159.4	-4,427.2	-352.6	1.51	1.20	-0.92	8.3	13.9	
15,593.0	91.54	177.21	11,157.5	-4,522.1	-348.9	1.39	0.83	-1.12	6.6	16.9	
15,689.0	90.84	178.80	11,155.6	-4,618.0	-345.5	1.81	-0.73	1.66	4.9	19.5	
15,785.0	91.45	178.27	11,153.6	-4,714.0	-343.1	0.84	0.64	-0.55	3.2	21.3	



EOG Resources, Inc.
EOG PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #502H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Site:	Driver 14 State	MD Reference:	KB = 25 @ 3650.0usft (H&P 651)
Well:	#502H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,862.7	92.16	177.84	11,151.2	-4,791.6	-340.4	1.07	0.92	-0.55	1.0	23.3
HL Crossing.15862.7' MD; 11151.2' TVD; -4791.6'; -340.4'; 92.16										
15,881.0	92.33	177.74	11,150.5	-4,809.9	-339.7	1.07	0.92	-0.55	0.3	23.9
15,914.0	92.68	177.57	11,149.0	-4,842.8	-338.4	1.18	1.06	-0.52	-1.1	25.0
Last MWD Survey										
15,960.0	92.68	177.57	11,146.9	-4,888.7	-336.4	0.00	0.00	0.00	-3.1	26.6
Projection To Bit - PBHL(driver 14 ST #502H)										

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,232.2	11,105.1	-172.6	-404.2	HL Crossing.11232.2' MD; 11105.1' TVD; -172.6'; -404.2'; 65.34
15,862.7	11,151.2	-4,791.6	-340.4	HL Crossing.15862.7' MD; 11151.2' TVD; -4791.6'; -340.4'; 92.16
15,914.0	11,149.0	-4,842.8	-338.4	Last MWD Survey
15,960.0	11,146.9	-4,888.7	-336.4	Projection To Bit

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------