



August 7, 2017

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

Dear District 2 - Artesia

Re: EOG Resources
Cacti AGB State Com No. 1
Eddy Co., NM
API #30-015-26047
Job No. 61581

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 09 2017

RECEIVED

Can before plugging Well . . .

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 606018). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Oscar Velasquez	1	0	7,600	7/28/17	7/28/17	Gyro

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964



Company: EOG

Job #: 61581

Well Name: Cacti AGB State Com No.1

County/State: Eddy Co., N.M.

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-26047

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
7/28/2017	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
7/28/2017	7600	0.85	260.58

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
0.12

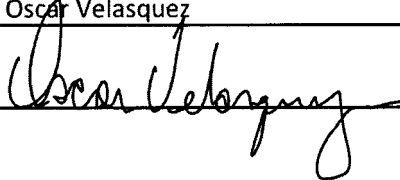
Gyro Operator: Phoenix Technology Services USA Ltd.

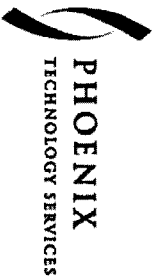
Gyro Supervisor: Angel Guebara

To the best of my knowledge I certify this survey data to be correct and true

Date: 7/28/2017

Print Name: Oscar Velasquez

Signature: 



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Date: 07/28/17
Calculation Method: Minimum Curvature
Proposed Azimuth: Ground
RKB - MSL in feet: Surface
Tie Into:

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.55	135.00	100	100.00	-0.34	0.34 S	0.34 E	0.48	135.00	0.55	0.55	135.00
	125.00	0.70	115.35	25	125.00	-0.49	0.49 S	0.56 E	0.75	131.05	1.04	0.60	-78.60
	150.00	0.65	114.80	25	150.00	-0.61	0.61 S	0.83 E	1.03	126.55	0.20	-0.20	-2.20
	175.00	0.70	93.51	25	174.99	-0.68	0.68 S	1.11 E	1.30	121.61	1.02	0.20	-85.16
	200.00	0.64	94.34	25	199.99	-0.70	0.70 S	1.40 E	1.57	116.64	0.24	-0.24	3.32
	225.00	0.64	96.85	25	224.99	-0.73	0.73 S	1.68 E	1.83	113.50	0.11	0.00	10.04
	250.00	0.64	91.27	25	249.99	-0.75	0.75 S	1.96 E	2.10	110.97	0.25	0.00	-22.32
	275.00	0.66	82.58	25	274.99	-0.73	0.73 S	2.24 E	2.36	108.16	0.40	0.08	-34.76
	300.00	0.51	97.54	25	299.99	-0.73	0.73 S	2.49 E	2.60	106.33	0.85	-0.60	59.84
	325.00	0.42	128.22	25	324.99	-0.80	0.80 S	2.68 E	2.79	106.69	1.04	-0.36	122.72
	350.00	0.34	115.31	25	349.98	-0.89	0.89 S	2.81 E	2.95	107.55	0.47	-0.32	-51.64
	375.00	0.35	129.54	25	374.98	-0.97	0.97 S	2.94 E	3.10	108.27	0.34	0.04	56.92
	400.00	0.43	131.66	25	399.98	-1.08	1.08 S	3.07 E	3.25	109.41	0.33	0.32	8.48
	425.00	0.45	108.53	25	424.98	-1.18	1.18 S	3.23 E	3.44	109.98	0.71	0.08	-92.52
	450.00	0.43	138.97	25	449.98	-1.28	1.28 S	3.39 E	3.62	110.66	0.93	-0.08	121.76
	475.00	0.63	117.65	25	474.98	-1.41	1.41 S	3.57 E	3.84	111.57	1.11	0.80	-85.28
	500.00	0.68	107.03	25	499.98	-1.52	1.52 S	3.83 E	4.12	111.61	0.52	0.20	-42.48
	525.00	0.80	105.70	25	524.98	-1.61	1.61 S	4.14 E	4.45	111.23	0.48	0.48	-5.32
	550.00	0.77	110.26	25	549.97	-1.72	1.72 S	4.47 E	4.79	110.99	0.28	-0.12	18.24
	575.00	0.92	113.49	25	574.97	-1.85	1.85 S	4.81 E	5.16	111.07	0.63	0.60	12.92
	600.00	0.91	126.98	25	599.97	-2.05	2.05 S	5.15 E	5.55	111.72	0.86	-0.04	53.96
	625.00	1.01	128.10	25	624.97	-2.31	2.31 S	5.49 E	5.95	112.82	0.41	0.40	4.48
	650.00	1.07	130.97	25	649.96	-2.60	2.60 S	5.84 E	6.39	113.99	0.32	0.24	11.48
	675.00	1.24	132.84	25	674.96	-2.93	2.93 S	6.21 E	6.87	115.29	0.70	0.68	7.48
	700.00	1.19	129.22	25	699.95	-3.28	3.28 S	6.61 E	7.38	116.41	0.37	-0.20	-14.48
	725.00	1.21	122.14	25	724.95	-3.59	3.59 S	7.03 E	7.90	117.02	0.60	0.08	-28.32
	750.00	1.23	120.99	25	749.94	-3.87	3.87 S	7.49 E	8.43	117.30	0.13	0.08	-4.60
	775.00	1.26	128.43	25	774.93	-4.17	4.17 S	7.93 E	8.96	117.75	0.66	0.12	29.76
	800.00	1.13	132.13	25	799.93	-4.51	4.51 S	8.33 E	9.47	118.43	0.60	-0.52	14.80
	825.00	1.10	139.96	25	824.92	-4.86	4.86 S	8.67 E	9.94	119.27	0.62	-0.12	31.32
	850.00	0.91	130.63	25	849.92	-5.17	5.17 S	8.97 E	10.36	119.96	1.00	-0.76	-37.32



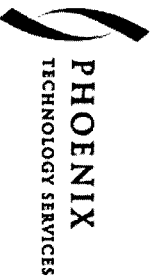
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth:
RKB - MSL in feet: Ground
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)					
	875.00	0.83	129.15	25	874.92	-5.42	5.42 S	9.26 E	10.73	120.31	0.33	-0.32	-5.92
	900.00	0.92	134.19	25	899.91	-5.67	5.67 S	9.55 E	11.11	120.70	0.47	0.36	20.16
	925.00	0.79	130.87	25	924.91	-5.92	5.92 S	9.82 E	11.47	121.09	0.56	-0.52	-13.28
	950.00	0.77	129.99	25	949.91	-6.14	6.14 S	10.08 E	11.81	121.36	0.09	-0.08	-3.52
	975.00	0.94	94.73	25	974.91	-6.27	6.27 S	10.42 E	12.16	121.04	2.17	0.68	-141.04
	1000.00	0.83	99.19	25	999.90	-6.31	6.31 S	10.80 E	12.51	120.32	0.52	-0.44	17.84
	1025.00	0.93	102.51	25	1024.90	-6.39	6.39 S	11.18 E	12.87	119.75	0.45	0.40	13.28
	1050.00	1.00	102.32	25	1049.90	-6.48	6.48 S	11.59 E	13.27	119.21	0.28	0.28	-0.76
	1075.00	0.97	107.74	25	1074.89	-6.59	6.59 S	12.00 E	13.69	118.77	0.39	-0.12	21.68
	1100.00	0.90	117.97	25	1099.89	-6.75	6.75 S	12.38 E	14.10	118.59	0.72	-0.28	40.92
	1125.00	0.86	120.67	25	1124.89	-6.93	6.93 S	12.71 E	14.48	118.61	0.23	-0.16	10.80
	1150.00	0.57	114.93	25	1149.88	-7.08	7.08 S	12.99 E	14.79	118.64	1.19	-1.16	-22.96
	1175.00	0.62	125.56	25	1174.88	-7.21	7.21 S	13.21 E	15.05	118.64	0.48	0.20	42.52
	1200.00	0.49	120.11	25	1199.88	-7.34	7.34 S	13.41 E	15.29	118.71	0.56	-0.52	-21.80
	1225.00	0.56	120.24	25	1224.88	-7.46	7.46 S	13.61 E	15.52	118.73	0.28	0.28	0.52
	1250.00	0.54	93.47	25	1249.88	-7.53	7.53 S	13.83 E	15.75	118.56	1.02	-0.08	-107.08
	1275.00	0.93	107.62	25	1274.88	-7.60	7.60 S	14.14 E	16.05	118.24	1.71	1.56	56.60
	1300.00	0.82	116.98	25	1299.87	-7.74	7.74 S	14.50 E	16.43	118.10	0.72	-0.44	37.44
	1325.00	0.71	125.03	25	1324.87	-7.91	7.91 S	14.78 E	16.76	118.15	0.61	-0.44	32.20
	1350.00	0.71	126.81	25	1349.87	-8.09	8.09 S	15.03 E	17.07	118.29	0.09	0.00	7.12
	1375.00	0.63	127.19	25	1374.87	-8.27	8.27 S	15.27 E	17.36	118.44	0.32	-0.32	1.52
	1400.00	0.60	125.47	25	1399.87	-8.43	8.43 S	15.48 E	17.63	118.56	0.14	-0.12	-6.88
	1425.00	0.46	120.09	25	1424.87	-8.55	8.55 S	15.68 E	17.86	118.62	0.59	-0.56	-21.52
	1450.00	0.45	79.99	25	1449.87	-8.59	8.59 S	15.86 E	18.03	118.43	1.25	-0.04	-160.40
	1475.00	0.84	104.49	25	1474.86	-8.61	8.61 S	16.13 E	18.29	118.10	1.88	1.56	98.00
	1500.00	0.91	113.70	25	1499.86	-8.74	8.74 S	16.49 E	18.67	117.92	0.63	0.28	36.84
	1525.00	0.91	112.68	25	1524.86	-8.90	8.90 S	16.86 E	19.06	117.82	0.06	0.00	-4.08
	1550.00	0.72	125.63	25	1549.86	-9.06	9.06 S	17.17 E	19.41	117.83	1.05	-0.76	51.80
	1575.00	0.75	122.93	25	1574.85	-9.25	9.25 S	17.43 E	19.73	117.94	0.18	0.12	-10.80
	1600.00	0.73	123.08	25	1599.85	-9.42	9.42 S	17.70 E	20.05	118.02	0.08	-0.08	0.60
	1625.00	0.50	121.32	25	1624.85	-9.56	9.56 S	17.93 E	20.32	118.08	0.92	-0.92	-7.04
	1650.00	0.78	82.50	25	1649.85	-9.60	9.60 S	18.19 E	20.57	117.82	2.00	1.12	-155.28
	1675.00	0.82	131.04	25	1674.85	-9.69	9.69 S	18.50 E	20.88	117.66	2.63	0.16	194.16
	1700.00	0.81	124.69	25	1699.84	-9.91	9.91 S	18.78 E	21.23	117.83	0.36	-0.04	-25.40



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth:
RKB - MSL in feet: Ground
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	1725.00	0.56	103.36	25	1724.84	-10.04	10.04 S	19.04 E	21.53	117.81	1.41	-1.00	-85.32
	1750.00	0.53	116.89	25	1749.84	-10.12	10.12 S	19.26 E	21.76	117.72	0.53	-0.12	54.12
	1775.00	0.52	119.93	25	1774.84	-10.23	10.23 S	19.46 E	21.99	117.73	0.12	-0.04	12.16
	1800.00	0.75	92.87	25	1799.84	-10.30	10.30 S	19.73 E	22.25	117.56	1.49	0.92	-108.24
	1825.00	0.84	112.10	25	1824.84	-10.37	10.37 S	20.06 E	22.58	117.34	1.12	0.36	76.92
	1850.00	0.81	122.85	25	1849.83	-10.54	10.54 S	20.38 E	22.94	117.34	0.63	-0.12	43.00
	1875.00	0.88	122.59	25	1874.83	-10.74	10.74 S	20.69 E	23.31	117.43	0.28	0.28	-1.04
	1900.00	0.50	122.82	25	1899.83	-10.90	10.90 S	20.94 E	23.61	117.50	1.52	-1.52	0.92
	1925.00	0.98	111.50	25	1924.83	-11.04	11.04 S	21.23 E	23.93	117.47	2.00	1.92	-45.28
	1950.00	0.92	127.20	25	1949.82	-11.24	11.24 S	21.59 E	24.34	117.49	1.06	-0.24	62.80
	1975.00	0.65	127.50	25	1974.82	-11.44	11.44 S	21.86 E	24.68	117.63	1.08	-1.08	1.20
	2000.00	0.72	134.23	25	1999.82	-11.64	11.64 S	22.09 E	24.97	117.79	0.43	0.28	26.92
	2025.00	0.40	118.02	25	2024.82	-11.79	11.79 S	22.28 E	25.20	117.89	1.42	-1.28	-64.84
	2050.00	0.62	74.54	25	2049.82	-11.80	11.80 S	22.48 E	25.39	117.68	1.72	0.88	-173.92
	2075.00	0.76	86.89	25	2074.81	-11.75	11.75 S	22.78 E	25.63	117.29	0.81	0.56	49.40
	2100.00	0.68	123.02	25	2099.81	-11.82	11.82 S	23.07 E	25.92	117.13	1.81	-0.32	144.52
	2125.00	0.61	125.41	25	2124.81	-11.98	11.98 S	23.30 E	26.20	117.21	0.30	-0.28	9.56
	2150.00	0.52	127.34	25	2149.81	-12.13	12.13 S	23.50 E	26.45	117.29	0.37	-0.36	7.72
	2175.00	0.61	129.30	25	2174.81	-12.28	12.28 S	23.69 E	26.69	117.39	0.37	0.36	7.84
	2200.00	0.57	130.26	25	2199.81	-12.44	12.44 S	23.89 E	26.94	117.51	0.16	-0.16	3.84
	2225.00	0.58	128.00	25	2224.81	-12.60	12.60 S	24.09 E	27.18	117.62	0.10	0.04	-9.04
	2250.00	0.55	116.62	25	2249.81	-12.73	12.73 S	24.29 E	27.43	117.66	0.46	-0.12	-45.52
	2275.00	0.56	112.83	25	2274.80	-12.83	12.83 S	24.51 E	27.67	117.63	0.15	0.04	-15.16
	2300.00	0.54	119.91	25	2299.80	-12.94	12.94 S	24.73 E	27.91	117.62	0.28	-0.08	28.32
	2325.00	0.55	116.89	25	2324.80	-13.05	13.05 S	24.94 E	28.15	117.63	0.12	0.04	-12.08
	2350.00	0.55	89.44	25	2349.80	-13.11	13.11 S	25.17 E	28.37	117.51	1.04	0.00	-109.80
	2375.00	0.34	146.27	25	2374.80	-13.17	13.17 S	25.33 E	28.54	117.47	1.85	-0.84	227.32
	2400.00	0.49	127.00	25	2399.80	-13.29	13.29 S	25.45 E	28.72	117.58	0.81	0.60	-77.08
	2425.00	0.39	119.67	25	2424.80	-13.40	13.40 S	25.61 E	28.91	117.62	0.46	-0.40	-29.32
	2450.00	0.13	280.19	25	2449.80	-13.44	13.44 S	25.66 E	28.96	117.64	2.06	-1.04	642.08
	2475.00	0.54	114.42	25	2474.80	-13.48	13.48 S	25.74 E	29.05	117.64	2.67	1.64	-663.08
	2500.00	0.48	144.88	25	2499.80	-13.62	13.62 S	25.91 E	29.27	117.73	1.10	-0.24	121.84
	2525.00	0.41	143.29	25	2524.80	-13.77	13.77 S	26.02 E	29.44	117.89	0.28	-0.28	-6.36
	2550.00	0.50	119.36	25	2549.80	-13.90	13.90 S	26.17 E	29.63	117.97	0.83	0.36	-95.72



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
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Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth: _____
RKB - MSL in feet: _____
Tie into: _____
Ground
Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	2575.00	0.21	138.20	25	2574.80	-13.99	13.99 S	26.29 E	29.78	118.01	1.24	-1.16	75.36
	2600.00	0.47	131.12	25	2599.79	-14.09	14.09 S	26.40 E	29.92	118.08	1.05	1.04	-28.32
	2625.00	0.51	80.11	25	2624.79	-14.14	14.14 S	26.59 E	30.11	118.00	1.69	0.16	-204.04
	2650.00	0.18	134.68	25	2649.79	-14.14	14.14 S	26.73 E	30.24	117.89	1.73	-1.32	218.28
	2675.00	0.44	132.64	25	2674.79	-14.24	14.24 S	26.82 E	30.37	117.96	1.04	1.04	-8.16
	2700.00	0.50	94.69	25	2699.79	-14.31	14.31 S	27.00 E	30.56	117.92	1.24	0.24	-151.80
	2725.00	0.14	22.04	25	2724.79	-14.29	14.29 S	27.12 E	30.66	117.78	1.91	-1.44	-290.60
	2750.00	0.53	122.22	25	2749.79	-14.32	14.32 S	27.23 E	30.77	117.74	2.29	1.56	400.72
	2775.00	0.24	30.48	25	2774.79	-14.34	14.34 S	27.36 E	30.89	117.66	2.35	-1.16	-366.96
	2800.00	0.48	134.66	25	2799.79	-14.37	14.37 S	27.46 E	30.99	117.62	2.35	0.96	416.72
	2825.00	0.45	124.83	25	2824.79	-14.50	14.50 S	27.61 E	31.19	117.70	0.34	-0.12	-39.32
	2850.00	0.19	332.45	25	2849.79	-14.52	14.52 S	27.67 E	31.25	117.68	2.50	-1.04	830.48
	2875.00	0.42	165.26	25	2874.79	-14.57	14.57 S	27.68 E	31.28	117.76	2.43	0.92	-668.76
	2900.00	0.37	207.20	25	2899.79	-14.73	14.73 S	27.66 E	31.34	118.03	1.15	-0.20	167.76
	2925.00	0.41	149.64	25	2924.79	-14.88	14.88 S	27.67 E	31.42	118.27	1.51	0.16	-230.24
	2950.00	0.42	220.75	25	2949.79	-15.03	15.03 S	27.66 E	31.48	118.51	1.93	0.04	284.44
	2975.00	0.42	154.92	25	2974.79	-15.18	15.18 S	27.64 E	31.53	118.78	1.83	0.00	-263.32
	3000.00	0.45	215.77	25	2999.79	-15.34	15.34 S	27.62 E	31.59	119.05	1.77	0.12	243.40
	3025.00	0.45	149.05	25	3024.79	-15.51	15.51 S	27.61 E	31.67	119.32	1.98	0.00	-266.88
	3050.00	0.24	170.42	25	3049.79	-15.64	15.64 S	27.67 E	31.79	119.48	0.97	-0.84	85.48
	3075.00	0.55	199.22	25	3074.79	-15.81	15.81 S	27.64 E	31.84	119.76	1.44	1.24	115.20
	3100.00	0.57	190.73	25	3099.78	-16.04	16.04 S	27.58 E	31.90	120.19	0.34	0.08	-33.96
	3125.00	0.42	148.64	25	3124.78	-16.24	16.24 S	27.60 E	32.03	120.47	1.53	-0.60	-168.36
	3150.00	0.62	235.49	25	3149.78	-16.40	16.40 S	27.54 E	32.05	120.77	2.92	0.80	347.40
	3175.00	0.59	185.52	25	3174.78	-16.60	16.60 S	27.41 E	32.05	121.20	2.05	-0.12	-199.88
	3200.00	0.27	151.90	25	3199.78	-16.78	16.78 S	27.43 E	32.16	121.46	1.58	-1.28	-134.48
	3225.00	0.65	210.33	25	3224.78	-16.96	16.96 S	27.39 E	32.21	121.76	2.23	1.52	233.72
	3250.00	0.39	182.00	25	3249.78	-17.16	17.16 S	27.31 E	32.26	122.15	1.43	-1.04	-113.32
	3275.00	0.15	195.57	25	3274.78	-17.28	17.28 S	27.30 E	32.31	122.33	0.99	-0.96	54.28
	3300.00	0.64	224.43	25	3299.78	-17.41	17.41 S	27.19 E	32.29	122.63	2.06	1.96	115.44
	3325.00	0.37	204.99	25	3324.78	-17.58	17.58 S	27.06 E	32.27	123.01	1.26	-1.08	-77.76
	3350.00	0.58	260.73	25	3349.78	-17.68	17.68 S	26.90 E	32.19	123.31	1.93	0.84	222.96
	3375.00	0.62	227.77	25	3374.77	-17.79	17.79 S	26.68 E	32.06	123.70	1.37	0.16	-131.84
	3400.00	0.56	205.92	25	3399.77	-17.99	17.99 S	26.52 E	32.05	124.15	0.93	-0.24	-87.40



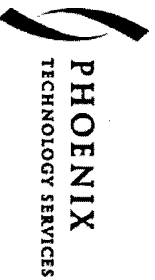
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacit AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth: RKB - MSL in feet:
Tie Into: Ground
Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	3425.00	0.25	224.58	25	3424.77	-18.14	18.14 S	26.43 E	32.06	124.46	1.33	-1.24	74.64
	3450.00	0.67	232.31	25	3449.77	-18.27	18.27 S	26.28 E	32.00	124.80	1.69	1.68	30.92
	3475.00	0.75	230.63	25	3474.77	-18.46	18.46 S	26.04 E	31.92	125.34	0.33	0.32	-6.72
	3500.00	0.56	209.98	25	3499.77	-18.67	18.67 S	25.85 E	31.89	125.84	1.20	-0.76	-82.60
	3525.00	0.55	269.99	25	3524.77	-18.78	18.78 S	25.67 E	31.80	126.18	2.22	-0.04	240.04
	3550.00	0.73	235.40	25	3549.77	-18.87	18.87 S	25.42 E	31.65	126.58	1.67	0.72	-138.36
	3575.00	0.92	246.35	25	3574.76	-19.04	19.04 S	25.10 E	31.50	127.18	0.98	0.76	43.80
	3600.00	0.91	246.00	25	3599.76	-19.20	19.20 S	24.74 E	31.31	127.81	0.05	-0.04	-1.40
	3625.00	1.05	249.31	25	3624.76	-19.36	19.36 S	24.34 E	31.10	128.50	0.60	0.56	13.24
	3650.00	1.01	247.27	25	3649.75	-19.53	19.53 S	23.92 E	30.88	129.22	0.22	-0.16	-8.16
	3675.00	1.04	252.47	25	3674.75	-19.68	19.68 S	23.50 E	30.65	129.94	0.39	0.12	20.80
	3700.00	0.86	247.20	25	3699.74	-19.82	19.82 S	23.11 E	30.45	130.61	0.80	-0.72	-21.08
	3725.00	1.11	250.75	25	3724.74	-19.97	19.97 S	22.71 E	30.25	131.33	1.03	1.00	14.20
	3750.00	1.09	240.94	25	3749.74	-20.17	20.17 S	22.28 E	30.05	132.16	0.76	-0.08	-39.24
	3775.00	1.23	252.62	25	3774.73	-20.36	20.36 S	21.81 E	29.84	133.03	1.10	0.56	46.72
	3800.00	1.18	251.06	25	3799.73	-20.53	20.53 S	21.31 E	29.59	133.92	0.24	-0.20	-6.24
	3825.00	1.20	255.05	25	3824.72	-20.68	20.68 S	20.82 E	29.34	134.81	0.34	0.08	15.96
	3850.00	1.29	253.55	25	3849.71	-20.83	20.83 S	20.29 E	29.08	135.74	0.38	0.36	-6.00
	3875.00	1.27	253.65	25	3874.71	-20.98	20.98 S	19.76 E	28.82	136.72	0.08	-0.08	0.40
	3900.00	1.32	256.86	25	3899.70	-21.13	21.13 S	19.21 E	28.56	137.72	0.35	0.20	12.84
	3925.00	1.48	257.12	25	3924.69	-21.26	21.26 S	18.62 E	28.26	138.80	0.64	0.64	1.04
	3950.00	1.54	257.38	25	3949.69	-21.41	21.41 S	17.97 E	27.95	139.99	0.24	0.24	1.04
	3975.00	1.48	263.04	25	3974.68	-21.52	21.52 S	17.33 E	27.63	141.16	0.64	-0.24	22.64
	4000.00	1.66	262.31	25	3999.67	-21.61	21.61 S	16.65 E	27.28	142.39	0.72	0.72	-2.92
	4025.00	1.86	259.06	25	4024.66	-21.74	21.74 S	15.89 E	26.92	143.83	0.89	0.80	-13.00
	4050.00	1.90	266.38	25	4049.64	-21.84	21.84 S	15.08 E	26.54	145.38	0.97	0.16	29.28
	4075.00	2.21	261.46	25	4074.63	-21.94	21.94 S	14.19 E	26.12	147.11	1.43	1.24	-19.68
	4100.00	2.14	268.81	25	4099.61	-22.02	22.02 S	13.24 E	25.69	148.97	1.15	-0.28	29.40
	4125.00	2.24	266.82	25	4124.59	-22.05	22.05 S	12.29 E	25.25	150.87	0.50	0.40	-7.96
	4150.00	2.22	267.21	25	4149.57	-22.10	22.10 S	11.32 E	24.83	152.89	0.10	-0.08	1.56
	4175.00	2.60	271.78	25	4174.55	-22.11	22.11 S	10.27 E	24.38	155.09	1.70	1.52	18.28
	4200.00	2.42	270.46	25	4199.53	-22.09	22.09 S	9.17 E	23.92	157.45	0.76	-0.72	-5.28
	4225.00	2.33	272.18	25	4224.50	-22.07	22.07 S	8.14 E	23.52	159.76	0.46	-0.36	6.88
	4250.00	2.72	270.69	25	4249.48	-22.04	22.04 S	7.04 E	23.13	162.29	1.58	1.56	-5.96



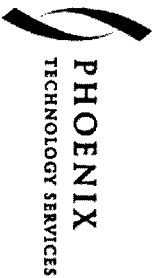
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth: Ground
RKB - MSL in feet: Surface
Tie Into: _____

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	4275.00	2.73	270.57	25	4274.45	-22.03	22.03 S	5.85 E	22.79	165.13	0.05	0.04	-0.48
	4300.00	2.79	268.78	25	4299.42	-22.03	22.03 S	4.64 E	22.52	168.10	0.42	0.24	-7.16
	4325.00	2.82	268.84	25	4324.39	-22.06	22.06 S	3.42 E	22.32	171.18	0.12	0.12	0.24
	4350.00	2.90	269.21	25	4349.36	-22.08	22.08 S	2.17 E	22.19	174.38	0.33	0.32	1.48
	4375.00	2.92	268.81	25	4374.33	-22.10	22.10 S	0.90 E	22.12	177.66	0.11	0.08	-1.60
	4400.00	2.91	270.70	25	4399.30	-22.11	22.11 S	0.37 W	22.11	180.95	0.39	-0.04	7.56
	4425.00	3.29	273.50	25	4424.26	-22.06	22.06 S	1.72 W	22.12	184.45	1.64	1.52	11.20
	4450.00	3.29	270.76	25	4449.22	-22.00	22.00 S	3.15 W	22.23	188.15	0.63	0.00	-10.96
	4475.00	3.30	271.26	25	4474.18	-21.98	21.98 S	4.59 W	22.45	191.79	0.12	0.04	2.00
	4500.00	3.06	271.23	25	4499.14	-21.95	21.95 S	5.97 W	22.74	195.23	0.96	-0.96	-0.12
	4525.00	3.43	272.82	25	4524.10	-21.90	21.90 S	7.39 W	23.11	198.64	1.52	1.48	6.36
	4550.00	3.34	271.53	25	4549.05	-21.84	21.84 S	8.86 W	23.57	202.09	0.47	-0.36	-5.16
	4575.00	3.57	272.28	25	4574.01	-21.79	21.79 S	10.37 W	24.13	205.45	0.94	0.92	3.00
	4600.00	3.99	276.26	25	4598.95	-21.66	21.66 S	12.01 W	24.77	209.01	1.98	1.68	15.92
	4625.00	3.62	280.78	25	4623.90	-21.42	21.42 S	13.65 W	25.40	212.51	1.90	-1.48	18.08
	4650.00	5.21	267.29	25	4648.83	-21.33	21.33 S	15.56 W	26.40	216.11	7.55	6.36	-53.96
	4675.00	5.87	260.87	25	4673.71	-21.58	21.58 S	17.96 W	28.08	219.76	3.62	2.64	-25.68
	4700.00	6.04	254.85	25	4698.57	-22.13	22.13 S	20.49 W	30.16	222.79	2.59	0.68	-24.08
	4725.00	6.02	248.66	25	4723.44	-22.95	22.95 S	22.98 W	32.48	225.04	2.60	-0.08	-24.76
	4750.00	5.94	242.95	25	4748.30	-24.02	24.02 S	25.35 W	34.92	226.55	2.40	-0.32	-22.84
	4775.00	5.87	237.00	25	4773.17	-25.30	25.30 S	27.58 W	37.42	227.46	2.46	-0.28	-23.80
	4800.00	5.80	231.08	25	4798.04	-26.79	26.79 S	29.63 W	39.95	227.88	2.42	-0.28	-23.68
	4825.00	5.73	224.57	25	4822.91	-28.47	28.47 S	31.49 W	42.45	227.88	2.63	-0.28	-26.04
	4850.00	5.71	218.51	25	4847.79	-30.34	30.34 S	33.14 W	44.93	227.53	2.42	-0.08	-24.24
	4875.00	5.55	212.08	25	4872.67	-32.33	32.33 S	34.56 W	47.32	226.90	2.60	-0.64	-25.72
	4900.00	5.31	205.33	25	4897.56	-34.40	34.40 S	35.69 W	49.57	226.05	2.73	-0.96	-27.00
	4925.00	4.34	206.09	25	4922.47	-36.30	36.30 S	36.60 W	51.55	225.24	3.89	-3.88	3.04
	4950.00	3.36	199.69	25	4947.41	-37.84	37.84 S	37.27 W	53.11	224.57	4.27	-3.92	-25.60
	4975.00	2.36	167.73	25	4972.38	-39.03	39.03 S	37.40 W	54.06	223.78	7.38	-4.00	-127.84
	5000.00	2.84	109.30	25	4997.36	-39.74	39.74 S	36.71 W	54.10	222.73	10.29	1.92	-233.72
	5025.00	3.77	240.60	25	5022.34	-40.35	40.35 S	36.84 W	54.64	222.40	24.13	3.72	525.20
	5050.00	4.35	204.36	25	5047.28	-41.61	41.61 S	37.95 W	56.32	222.36	10.33	2.32	-144.96
	5075.00	4.55	190.52	25	5072.21	-43.45	43.45 S	38.52 W	58.07	221.56	4.36	0.80	-55.36
	5100.00	4.69	185.41	25	5097.12	-45.44	45.44 S	38.80 W	59.75	220.49	1.74	0.56	-20.44



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth:
RKB - MSL in feet: Ground
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	5125.00	4.63	181.44	25	5122.04	-47.47	47.47 S	38.92 W	61.39	219.35	1.31	-0.24	-15.88
	5150.00	4.47	176.82	25	5146.96	-49.45	49.45 S	38.89 W	62.91	218.18	1.60	-0.64	-18.48
	5175.00	4.28	172.68	25	5171.89	-51.35	51.35 S	38.72 W	64.31	217.02	1.47	-0.76	-16.56
	5200.00	4.09	168.83	25	5196.82	-53.15	53.15 S	38.43 W	65.59	215.87	1.36	-0.76	-15.40
	5225.00	4.12	164.09	25	5221.76	-54.89	54.89 S	38.01 W	66.76	214.70	1.36	-0.12	-18.96
	5250.00	3.93	159.25	25	5246.70	-56.55	56.55 S	37.46 W	67.83	213.52	1.56	-0.76	-19.36
	5275.00	4.01	163.93	25	5271.64	-58.19	58.19 S	36.91 W	68.91	212.39	1.33	0.32	-18.72
	5300.00	4.17	159.22	25	5296.57	-59.88	59.88 S	36.35 W	70.05	211.26	1.49	0.64	-18.84
	5325.00	4.03	153.92	25	5321.51	-61.52	61.52 S	35.64 W	71.10	210.08	1.62	-0.56	-21.20
	5350.00	3.88	147.62	25	5346.45	-63.03	63.03 S	34.80 W	72.00	208.91	1.84	-0.60	-25.20
	5375.00	3.80	146.85	25	5371.40	-64.43	64.43 S	33.89 W	72.81	207.75	0.38	-0.32	-3.08
	5400.00	3.40	191.43	25	5396.35	-65.86	65.86 S	33.59 W	73.93	207.02	11.02	-1.60	-178.32
	5425.00	3.67	187.94	25	5421.30	-67.37	67.37 S	33.85 W	75.40	206.67	1.38	1.08	-13.96
	5450.00	3.70	207.09	25	5446.25	-68.88	68.88 S	34.32 W	76.96	206.49	4.90	0.12	76.60
	5475.00	3.72	207.90	25	5471.20	-70.32	70.32 S	35.07 W	78.58	206.51	0.22	0.08	3.24
	5500.00	3.62	202.96	25	5496.15	-71.76	71.76 S	35.76 W	80.18	206.49	1.33	-0.40	-19.76
	5525.00	3.65	198.19	25	5521.10	-73.25	73.25 S	36.31 W	81.75	206.37	1.22	0.12	-19.08
	5550.00	3.28	205.66	25	5546.05	-74.65	74.65 S	36.87 W	83.26	206.29	2.33	-1.48	29.88
	5575.00	3.61	232.66	25	5571.01	-75.77	75.77 S	37.81 W	84.68	206.52	6.56	1.32	108.00
	5600.00	3.07	219.37	25	5595.97	-76.76	76.76 S	38.86 W	86.04	206.85	3.76	-2.16	-53.16
	5625.00	3.52	222.16	25	5620.93	-77.85	77.85 S	39.80 W	87.43	207.08	1.91	1.80	11.16
	5650.00	3.37	213.46	25	5645.88	-79.03	79.03 S	40.72 W	88.90	207.26	2.17	-0.60	-34.80
	5675.00	3.24	211.92	25	5670.84	-80.24	80.24 S	41.50 W	90.34	207.35	0.63	-0.52	-6.16
	5700.00	3.24	217.46	25	5695.80	-81.41	81.41 S	42.30 W	91.74	207.46	1.25	0.00	22.16
	5725.00	2.51	198.51	25	5720.77	-82.49	82.49 S	42.90 W	92.98	207.48	4.76	-2.92	-75.80
	5750.00	3.03	215.28	25	5745.74	-83.54	83.54 S	43.46 W	94.17	207.48	3.83	2.08	67.08
	5775.00	2.32	202.78	25	5770.71	-84.55	84.55 S	44.04 W	95.33	207.51	3.66	-2.84	-50.00
	5800.00	2.53	215.34	25	5795.69	-85.47	85.47 S	44.55 W	96.38	207.53	2.28	0.84	50.24
	5825.00	2.24	209.27	25	5820.67	-86.34	86.34 S	45.11 W	97.42	207.59	1.54	-1.16	-24.28
	5850.00	2.45	211.53	25	5845.65	-87.22	87.22 S	45.63 W	98.44	207.61	0.92	0.84	9.04
	5875.00	2.46	211.40	25	5870.62	-88.14	88.14 S	46.19 W	99.51	207.66	0.05	0.04	-0.52
	5900.00	2.33	212.39	25	5895.60	-89.02	89.02 S	46.74 W	100.55	207.70	0.55	-0.52	3.96
	5925.00	2.31	213.08	25	5920.58	-89.88	89.88 S	47.29 W	101.56	207.75	0.14	-0.08	2.76
	5950.00	1.97	210.21	25	5945.56	-90.67	90.67 S	47.78 W	102.49	207.79	1.43	-1.36	-11.48



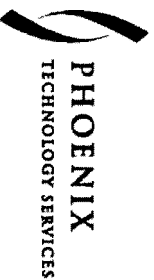
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth: Ground
RKB - MSL in feet: Surface
Tie Into: _____

Survey Tool Type	Survey Depth (ft)	Inclina-tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure	Dogleg	Build	Walk
							N/S	E/W	Distance (ft)	Angle (deg)	Severity (d/100')	Rate (d/100')
	5975.00	1.81	217.98	25	5970.55	-91.35	91.35 S	48.24 W	103.31	207.84	1.21	-0.64
	6000.00	1.95	209.28	25	5995.54	-92.03	92.03 S	48.69 W	104.12	207.88	1.27	-0.56
	6025.00	2.15	209.14	25	6020.52	-92.81	92.81 S	49.12 W	105.01	207.89	0.80	-0.56
	6050.00	2.30	215.50	25	6045.50	-93.63	93.63 S	49.64 W	105.98	207.93	1.15	-0.60
	6075.00	2.25	214.55	25	6070.48	-94.45	94.45 S	50.21 W	106.96	208.00	0.25	-0.20
	6100.00	2.18	216.54	25	6095.46	-95.23	95.23 S	50.77 W	107.92	208.07	0.42	-0.28
	6125.00	2.15	219.12	25	6120.45	-95.98	95.98 S	51.35 W	108.85	208.15	0.41	-0.12
	6150.00	2.06	224.26	25	6145.43	-96.66	96.66 S	51.96 W	109.74	208.26	0.84	-0.36
	6175.00	2.30	229.48	25	6170.41	-97.31	97.31 S	52.66 W	110.64	208.42	1.25	-0.96
	6200.00	2.10	224.93	25	6195.39	-97.96	97.96 S	53.36 W	111.55	208.58	1.06	-0.80
	6225.00	2.03	224.23	25	6220.38	-98.60	98.60 S	54.00 W	112.42	208.71	0.30	-0.28
	6250.00	2.08	225.01	25	6245.36	-99.24	99.24 S	54.63 W	113.28	208.83	0.23	-0.20
	6275.00	1.90	225.21	25	6270.35	-99.85	99.85 S	55.24 W	114.11	208.95	0.72	-0.72
	6300.00	1.92	217.65	25	6295.33	-100.48	100.48 S	55.79 W	114.93	209.04	1.01	-0.08
	6325.00	1.87	222.19	25	6320.32	-101.11	101.11 S	56.32 W	115.74	209.12	0.63	-0.20
	6350.00	1.87	221.22	25	6345.30	-101.72	101.72 S	56.86 W	116.53	209.21	0.13	0.00
	6375.00	1.89	220.51	25	6370.29	-102.34	102.34 S	57.40 W	117.34	209.29	0.12	0.08
	6400.00	1.82	223.05	25	6395.28	-102.94	102.94 S	57.94 W	118.13	209.37	0.43	-0.28
	6425.00	1.87	220.82	25	6420.27	-103.54	103.54 S	58.48 W	118.91	209.46	0.35	0.20
	6450.00	1.48	208.86	25	6445.25	-104.13	104.13 S	58.90 W	119.64	209.49	2.09	-1.56
	6475.00	1.67	225.92	25	6470.25	-104.67	104.67 S	59.32 W	120.31	209.54	2.01	0.76
	6500.00	1.47	228.31	25	6495.24	-105.14	105.14 S	59.82 W	120.96	209.64	0.84	-0.80
	6525.00	1.41	244.38	25	6520.23	-105.48	105.48 S	60.33 W	121.52	209.77	1.63	-0.24
	6550.00	2.13	241.80	25	6545.22	-105.84	105.84 S	61.02 W	122.17	209.97	2.90	2.88
	6575.00	1.87	222.15	25	6570.20	-106.36	106.36 S	61.70 W	122.96	210.12	2.92	-1.04
	6600.00	2.11	233.99	25	6595.19	-106.93	106.93 S	62.35 W	123.78	210.25	1.90	0.96
	6625.00	1.58	231.73	25	6620.17	-107.41	107.41 S	62.99 W	124.52	210.39	2.14	-2.12
	6650.00	1.97	232.54	25	6645.16	-107.89	107.89 S	63.60 W	125.24	210.52	1.56	1.56
	6675.00	1.81	239.24	25	6670.15	-108.35	108.35 S	64.28 W	125.99	210.68	1.09	-0.64
	6700.00	1.91	248.46	25	6695.13	-108.71	108.71 S	65.01 W	126.66	210.88	1.26	0.40
	6725.00	2.02	249.17	25	6720.12	-109.02	109.02 S	65.81 W	127.34	211.12	0.45	0.44
	6750.00	2.03	249.11	25	6745.10	-109.33	109.33 S	66.64 W	128.04	211.36	0.04	0.04
	6775.00	2.73	258.19	25	6770.08	-109.61	109.61 S	67.63 W	128.80	211.68	3.17	2.80
	6800.00	2.04	250.70	25	6795.06	-109.88	109.88 S	68.64 W	129.56	211.99	3.02	-2.76



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: Cacti AGB State Com No.1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 61581
Grid Corr.: 0.12
Lat: 32.601620
Long: -104.557430
Grid Ref: NAD 83

Calculation Method: Minimum Curvature
Proposed Azimuth: RKB - MSL in feet:
Tie Into: Ground
Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	6825.00	1.99	250.93	25	6820.05	-110.17	110.17 S	69.47 W	130.24	212.23	0.20	-0.20	0.92
	6850.00	2.02	250.99	25	6845.03	-110.45	110.45 S	70.29 W	130.92	212.47	0.12	0.12	0.24
	6875.00	1.91	252.86	25	6870.02	-110.72	110.72 S	71.11 W	131.59	212.71	0.51	-0.44	7.48
	6900.00	1.75	254.61	25	6895.00	-110.95	110.95 S	71.87 W	132.19	212.94	0.68	-0.64	7.00
	6925.00	1.52	257.94	25	6919.99	-111.12	111.12 S	72.57 W	132.71	213.15	1.00	-0.92	13.32
	6950.00	1.86	269.41	25	6944.98	-111.19	111.19 S	73.30 W	133.17	213.39	1.91	1.36	45.88
	6975.00	1.94	250.55	25	6969.97	-111.33	111.33 S	74.10 W	133.74	213.65	2.51	0.32	-75.44
	7000.00	1.53	273.19	25	6994.96	-111.46	111.46 S	74.83 W	134.25	213.88	3.16	-1.64	90.56
	7025.00	1.59	272.54	25	7019.95	-111.42	111.42 S	75.51 W	134.60	214.13	0.25	0.24	-2.60
	7050.00	1.01	257.36	25	7044.94	-111.46	111.46 S	76.07 W	134.94	214.32	2.68	-2.32	-60.72
	7075.00	1.19	273.51	25	7069.94	-111.49	111.49 S	76.55 W	135.24	214.47	1.43	0.72	64.60
	7100.00	1.24	265.65	25	7094.93	-111.49	111.49 S	77.08 W	135.54	214.66	0.70	0.20	-31.44
	7125.00	1.35	274.31	25	7119.92	-111.49	111.49 S	77.64 W	135.86	214.85	0.90	0.44	34.64
	7150.00	1.43	263.75	25	7144.92	-111.50	111.50 S	78.24 W	136.22	215.06	1.07	0.32	-42.24
	7175.00	1.51	263.37	25	7169.91	-111.57	111.57 S	78.88 W	136.64	215.26	0.32	0.32	-1.52
	7200.00	1.57	272.40	25	7194.90	-111.60	111.60 S	79.55 W	137.05	215.48	1.00	0.24	36.12
	7225.00	1.85	269.56	25	7219.89	-111.59	111.59 S	80.30 W	137.47	215.74	1.17	1.12	-11.36
	7250.00	2.04	261.07	25	7244.87	-111.66	111.66 S	81.14 W	138.03	216.00	1.38	0.76	-33.96
	7275.00	1.78	263.65	25	7269.86	-111.77	111.77 S	81.96 W	138.60	216.25	1.10	-1.04	10.32
	7300.00	1.45	270.61	25	7294.85	-111.81	111.81 S	82.67 W	139.05	216.48	1.53	-1.32	27.84
	7325.00	1.28	253.29	25	7319.84	-111.89	111.89 S	83.25 W	139.46	216.65	1.78	-0.68	-69.28
	7350.00	1.74	255.64	25	7344.83	-112.06	112.06 S	83.89 W	139.98	216.82	1.86	1.84	9.40
	7375.00	1.60	267.78	25	7369.82	-112.17	112.17 S	84.60 W	140.50	217.02	1.52	-0.56	48.56
	7400.00	1.27	277.66	25	7394.82	-112.15	112.15 S	85.23 W	140.86	217.23	1.65	-1.32	39.52
	7425.00	0.87	280.23	25	7419.81	-112.08	112.08 S	85.69 W	141.08	217.40	1.61	-1.60	10.28
	7450.00	1.33	248.44	25	7444.81	-112.15	112.15 S	86.14 W	141.41	217.53	2.99	1.84	-127.16
	7475.00	1.38	271.21	25	7469.80	-112.25	112.25 S	86.71 W	141.84	217.69	2.15	0.20	91.08
	7500.00	0.99	278.24	25	7494.80	-112.21	112.21 S	87.23 W	142.13	217.86	1.66	-1.56	28.12
	7525.00	1.04	242.65	25	7519.79	-112.28	112.28 S	87.64 W	142.44	217.97	2.49	0.20	-142.36
	7550.00	1.38	261.38	25	7544.79	-112.43	112.43 S	88.14 W	142.87	218.09	2.07	1.36	74.92
	7575.00	1.31	282.47	25	7569.78	-112.42	112.42 S	88.72 W	143.21	218.28	1.99	-0.28	84.36
	7600.00	0.85	260.58	25	7594.77	-112.39	112.39 S	89.18 W	143.47	218.43	2.44	-1.84	-87.56