



PHOENIX
TECHNOLOGY SERVICES

January 12, 2018

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

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 16 2018

Dear District 2 - Artesia

RECEIVED

Re: EOG Resources
North Dagger Draw Upper Penn 127
Eddy Co., New Mexico
API #30-015-25787
Job No. 61206

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	
Andy Askew	127	0	7,550	5/4/17	5/4/17	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

JAN 16 2018

SURVEY CERTIFICATION FORM

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



PHOENIX
TECHNOLOGY SERVICES

Company: EOG

Job #: 61206

Well Name: North Dagger Draw Upper Penn 127

County/State: Eddy/ NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-25787

TIE-IN DATA

0	0	0	0	0	0	Surface

First Survey

2017-05-04	0	0	0

Last Survey

2017-05-04	7550	1.88	272.7

Projected TD Survey

0	0	0	0	0.1

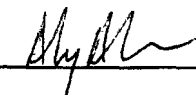
Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

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

Date: 5-4-17

Print Name: Andy Askew

Signature: 



PHOENIX

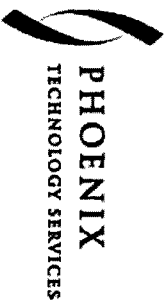
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Date: 05-04-17
Calculation Method: Minimum Curvature
Proposed Azimuth: 15
RKB - MSL in feet: 15
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		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	0.15	292.32	100	100.00	0.05	0.05 N	0.12 W	0.13	292.32	0.15	0.15	292.32
	125.00	0.17	309.79	25	125.00	0.09	0.09 N	0.18 W	0.20	295.52	0.21	0.08	69.88
	150.00	0.12	214.10	25	150.00	0.09	0.09 N	0.22 W	0.24	291.52	0.87	-0.20	-382.76
	175.00	0.27	306.27	25	175.00	0.10	0.10 N	0.29 W	0.30	289.52	1.20	0.60	368.68
	200.00	0.41	207.16	25	200.00	0.06	0.06 N	0.37 W	0.38	278.58	2.10	0.56	-396.44
	225.00	0.59	203.96	25	225.00	-0.14	0.14 S	0.47 W	0.49	253.20	0.73	0.72	-12.80
	250.00	0.65	198.75	25	250.00	-0.39	0.39 S	0.56 W	0.69	235.17	0.33	0.24	-20.84
	275.00	0.70	205.26	25	275.00	-0.67	0.67 S	0.68 W	0.95	225.43	0.37	0.20	26.04
	300.00	0.58	206.86	25	299.99	-0.92	0.92 S	0.80 W	1.21	221.04	0.49	-0.48	6.40
	325.00	0.71	207.78	25	324.99	-1.17	1.17 S	0.93 W	1.49	218.48	0.52	0.52	3.68
	350.00	0.65	220.53	25	349.99	-1.41	1.41 S	1.09 W	1.78	217.72	0.65	-0.24	51.00
	375.00	0.65	199.46	25	374.99	-1.65	1.65 S	1.23 W	2.06	216.68	0.95	0.00	-84.28
	400.00	0.67	196.28	25	399.99	-1.93	1.93 S	1.32 W	2.33	214.40	0.17	0.08	-12.72
	425.00	0.67	194.81	25	424.99	-2.21	2.21 S	1.40 W	2.61	212.33	0.07	0.00	-5.88
	450.00	0.70	198.39	25	449.98	-2.49	2.49 S	1.48 W	2.90	210.73	0.21	0.12	14.32
	475.00	0.80	203.71	25	474.98	-2.80	2.80 S	1.60 W	3.22	209.77	0.49	0.40	21.28
	500.00	0.76	199.42	25	499.98	-3.12	3.12 S	1.73 W	3.56	209.00	0.28	-0.16	-17.16
	525.00	0.79	196.98	25	524.98	-3.44	3.44 S	1.83 W	3.89	208.06	0.18	0.12	-9.76
	550.00	0.75	183.14	25	549.97	-3.76	3.76 S	1.89 W	4.21	206.67	0.76	-0.16	-55.36
	575.00	0.76	175.03	25	574.97	-4.09	4.09 S	1.89 W	4.51	204.74	0.43	0.04	-32.44
	600.00	0.87	189.61	25	599.97	-4.45	4.45 S	1.90 W	4.84	203.18	0.94	0.44	58.32
	625.00	0.78	203.48	25	624.97	-4.79	4.79 S	2.00 W	5.19	202.69	0.87	-0.36	55.48
	650.00	0.95	189.87	25	649.96	-5.15	5.15 S	2.11 W	5.56	202.24	1.06	0.68	-54.44
	675.00	0.92	190.02	25	674.96	-5.55	5.55 S	2.18 W	5.96	201.41	0.12	-0.12	0.60
	700.00	0.98	189.15	25	699.96	-5.96	5.96 S	2.25 W	6.37	200.64	0.25	0.24	-3.48
	725.00	0.99	192.19	25	724.95	-6.38	6.38 S	2.32 W	6.79	200.02	0.21	0.04	12.16
	750.00	1.10	196.90	25	749.95	-6.82	6.82 S	2.44 W	7.25	199.68	0.56	0.44	18.84



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
RKB - MSL in feet: 15
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		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	775.00	1.14	198.26	25	774.94	-7.29	7.29 S	2.59 W	7.73	199.55	0.19	0.16	5.44
	800.00	1.11	202.46	25	799.94	-7.75	7.75 S	2.76 W	8.22	199.60	0.35	-0.12	16.80
	825.00	1.18	205.27	25	824.93	-8.20	8.20 S	2.96 W	8.72	199.84	0.36	0.28	11.24
	850.00	1.25	207.74	25	849.93	-8.68	8.68 S	3.20 W	9.25	200.23	0.35	0.28	9.88
	875.00	1.31	211.78	25	874.92	-9.16	9.16 S	3.47 W	9.80	200.77	0.43	0.24	16.16
	900.00	1.37	209.29	25	899.92	-9.67	9.67 S	3.77 W	10.38	201.31	0.33	0.24	-9.96
	925.00	1.51	214.09	25	924.91	-10.20	10.20 S	4.10 W	10.99	201.91	0.74	0.56	19.20
	950.00	1.51	213.91	25	949.90	-10.75	10.75 S	4.47 W	11.64	202.59	0.02	0.00	-0.72
	975.00	1.53	217.21	25	974.89	-11.29	11.29 S	4.86 W	12.29	203.28	0.36	0.08	13.20
	1000.00	1.60	213.74	25	999.88	-11.84	11.84 S	5.25 W	12.95	203.92	0.47	0.28	-13.88
	1025.00	1.46	211.20	25	1024.87	-12.40	12.40 S	5.61 W	13.61	204.34	0.62	-0.56	-10.16
	1050.00	1.51	210.74	25	1049.86	-12.96	12.96 S	5.94 W	14.26	204.64	0.21	0.20	-1.84
	1075.00	1.58	212.95	25	1074.86	-13.53	13.53 S	6.30 W	14.93	204.97	0.37	0.28	8.84
	1100.00	1.69	215.29	25	1099.84	-14.12	14.12 S	6.70 W	15.63	205.38	0.51	0.44	9.36
	1125.00	1.67	213.93	25	1124.83	-14.73	14.73 S	7.12 W	16.35	205.80	0.18	-0.08	-5.44
	1150.00	1.71	217.11	25	1149.82	-15.32	15.32 S	7.55 W	17.08	206.21	0.41	0.16	12.72
	1175.00	1.70	221.32	25	1174.81	-15.90	15.90 S	8.02 W	17.81	206.75	0.50	-0.04	16.84
	1200.00	1.73	222.71	25	1199.80	-16.46	16.46 S	8.52 W	18.53	207.36	0.21	0.12	5.56
	1225.00	1.77	225.35	25	1224.79	-17.01	17.01 S	9.05 W	19.26	208.01	0.36	0.16	10.56
	1250.00	1.74	225.50	25	1249.78	-17.54	17.54 S	9.59 W	19.99	208.67	0.12	-0.12	0.60
	1275.00	1.75	224.56	25	1274.77	-18.08	18.08 S	10.13 W	20.73	209.26	0.12	0.04	-3.76
	1300.00	1.72	225.78	25	1299.75	-18.61	18.61 S	10.67 W	21.45	209.82	0.19	-0.12	4.88
	1325.00	1.68	231.47	25	1324.74	-19.10	19.10 S	11.22 W	22.16	210.43	0.69	-0.16	22.76
	1350.00	1.74	228.17	25	1349.73	-19.59	19.59 S	11.79 W	22.86	211.05	0.46	0.24	-13.20
	1375.00	1.70	229.07	25	1374.72	-20.08	20.08 S	12.36 W	23.58	211.60	0.19	-0.16	3.60
	1400.00	1.71	229.48	25	1399.71	-20.57	20.57 S	12.92 W	24.29	212.13	0.06	0.04	1.64
	1425.00	1.61	232.76	25	1424.70	-21.02	21.02 S	13.48 W	24.97	212.67	0.55	-0.40	13.12
	1450.00	1.64	233.22	25	1449.69	-21.45	21.45 S	14.05 W	25.64	213.22	0.13	0.12	1.84
	1475.00	1.52	241.88	25	1474.68	-21.82	21.82 S	14.63 W	26.27	213.84	1.07	-0.48	34.64
	1500.00	1.61	232.35	25	1499.67	-22.19	22.19 S	15.20 W	26.90	214.41	1.10	0.36	-38.12



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Well: North Dagger Draw Upper Penn 127
Location: Eddy Co, NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
RKB - MSL in feet: 15
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		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	1525.00	1.61	232.84	25	1524.66	-22.62	22.62 S	15.76 W	27.56	214.86	0.06	0.00	1.96
	1550.00	1.56	234.73	25	1549.65	-23.03	23.03 S	16.31 W	28.22	215.32	0.29	-0.20	7.56
	1575.00	1.47	234.14	25	1574.64	-23.41	23.41 S	16.85 W	28.84	215.75	0.37	-0.36	-2.36
	1600.00	1.40	237.70	25	1599.63	-23.76	23.76 S	17.37 W	29.43	216.17	0.45	-0.28	14.24
	1625.00	1.36	238.50	25	1624.63	-24.08	24.08 S	17.88 W	29.99	216.60	0.18	-0.16	3.20
	1650.00	1.36	231.16	25	1649.62	-24.42	24.42 S	18.36 W	30.55	216.94	0.70	0.00	-29.36
	1675.00	1.24	240.27	25	1674.61	-24.74	24.74 S	18.83 W	31.09	217.28	0.95	-0.48	36.44
	1700.00	1.21	239.21	25	1699.61	-25.01	25.01 S	19.29 W	31.59	217.65	0.15	-0.12	-4.24
	1725.00	1.14	239.68	25	1724.60	-25.27	25.27 S	19.73 W	32.06	217.99	0.28	-0.28	1.88
	1750.00	1.06	243.09	25	1749.60	-25.50	25.50 S	20.15 W	32.50	218.32	0.41	-0.32	13.64
	1775.00	1.12	238.21	25	1774.59	-25.73	25.73 S	20.57 W	32.94	218.63	0.44	0.24	-19.52
	1800.00	1.08	238.72	25	1799.59	-25.98	25.98 S	20.98 W	33.40	218.91	0.16	-0.16	2.04
	1825.00	1.10	241.33	25	1824.58	-26.22	26.22 S	21.39 W	33.84	219.20	0.21	0.08	10.44
	1850.00	1.14	242.06	25	1849.58	-26.45	26.45 S	21.82 W	34.29	219.52	0.17	0.16	2.92
	1875.00	1.06	248.88	25	1874.58	-26.65	26.65 S	22.25 W	34.72	219.86	0.61	-0.32	27.28
	1900.00	1.03	245.40	25	1899.57	-26.83	26.83 S	22.67 W	35.13	220.20	0.28	-0.12	-13.92
	1925.00	0.91	256.67	25	1924.57	-26.97	26.97 S	23.07 W	35.49	220.55	0.90	-0.48	45.08
	1950.00	0.83	247.35	25	1949.56	-27.09	27.09 S	23.43 W	35.81	220.86	0.65	-0.32	-37.28
	1975.00	0.77	240.23	25	1974.56	-27.24	27.24 S	23.75 W	36.14	221.08	0.46	-0.24	-28.48
	2000.00	0.79	232.17	25	1999.56	-27.43	27.43 S	24.03 W	36.46	221.22	0.45	0.08	-32.24
	2025.00	0.71	239.97	25	2024.56	-27.61	27.61 S	24.30 W	36.78	221.35	0.52	-0.32	31.20
	2050.00	0.62	240.65	25	2049.56	-27.75	27.75 S	24.55 W	37.05	221.49	0.36	-0.36	2.72
	2075.00	0.66	244.53	25	2074.55	-27.88	27.88 S	24.80 W	37.31	221.65	0.24	0.16	15.52
	2100.00	0.71	250.47	25	2099.55	-28.00	28.00 S	25.07 W	37.58	221.85	0.35	0.20	23.76
	2125.00	0.58	269.02	25	2124.55	-28.05	28.05 S	25.35 W	37.81	222.10	0.98	-0.52	74.20
	2150.00	0.68	254.01	25	2149.55	-28.09	28.09 S	25.62 W	38.02	222.36	0.77	0.40	-60.04
	2175.00	0.60	262.31	25	2174.55	-28.15	28.15 S	25.89 W	38.25	222.60	0.49	-0.32	33.20
	2200.00	0.57	256.53	25	2199.55	-28.20	28.20 S	26.14 W	38.45	222.83	0.26	-0.12	-23.12
	2225.00	0.58	240.91	25	2224.55	-28.29	28.29 S	26.37 W	38.67	222.99	0.63	0.04	-62.48
	2250.00	0.56	13.35	25	2249.55	-28.23	28.23 S	26.45 W	38.69	223.14	4.17	-0.08	-910.24



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Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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')
	2275.00	0.61	254.87	25	2274.54	-28.15	28.15 S	26.55 W	38.69	223.33	4.02	0.20	966.08
	2300.00	0.56	260.62	25	2299.54	-28.20	28.20 S	26.80 W	38.91	223.54	0.31	-0.20	23.00
	2325.00	0.59	251.55	25	2324.54	-28.26	28.26 S	27.04 W	39.12	223.74	0.38	0.12	-36.28
	2350.00	0.76	251.00	25	2349.54	-28.36	28.36 S	27.32 W	39.38	223.94	0.68	0.68	-2.20
	2375.00	0.75	250.13	25	2374.54	-28.47	28.47 S	27.63 W	39.67	224.15	0.06	-0.04	-3.48
	2400.00	0.77	255.99	25	2399.54	-28.56	28.56 S	27.95 W	39.96	224.38	0.32	0.08	23.44
	2425.00	0.83	257.69	25	2424.53	-28.64	28.64 S	28.29 W	40.26	224.65	0.26	0.24	6.80
	2450.00	0.95	263.99	25	2449.53	-28.70	28.70 S	28.67 W	40.57	224.97	0.62	0.48	25.20
	2475.00	1.04	272.70	25	2474.53	-28.71	28.71 S	29.11 W	40.89	225.39	0.70	0.36	34.84
	2500.00	1.17	270.15	25	2499.52	-28.70	28.70 S	29.59 W	41.22	225.87	0.56	0.52	-10.20
	2525.00	1.12	274.96	25	2524.52	-28.68	28.68 S	30.09 W	41.57	226.37	0.43	-0.20	19.24
	2550.00	1.11	270.00	25	2549.51	-28.66	28.66 S	30.57 W	41.90	226.85	0.39	-0.04	-19.84
	2575.00	1.11	270.25	25	2574.51	-28.66	28.66 S	31.06 W	42.26	227.30	0.02	0.00	1.00
	2600.00	1.17	271.62	25	2599.50	-28.65	28.65 S	31.55 W	42.62	227.76	0.26	0.24	5.48
	2625.00	1.08	269.67	25	2624.50	-28.64	28.64 S	32.04 W	42.98	228.21	0.39	-0.36	-7.80
	2650.00	1.14	270.66	25	2649.49	-28.64	28.64 S	32.53 W	43.34	228.63	0.25	0.24	3.96
	2675.00	1.06	269.26	25	2674.49	-28.64	28.64 S	33.01 W	43.70	229.05	0.34	-0.32	-5.60
	2700.00	1.09	270.69	25	2699.48	-28.64	28.64 S	33.48 W	44.06	229.45	0.16	0.12	5.72
	2725.00	1.06	272.08	25	2724.48	-28.63	28.63 S	33.95 W	44.41	229.85	0.16	-0.12	5.56
	2750.00	1.15	272.22	25	2749.47	-28.61	28.61 S	34.43 W	44.77	230.27	0.36	0.36	0.56
	2775.00	1.05	274.69	25	2774.47	-28.59	28.59 S	34.91 W	45.12	230.69	0.44	-0.40	9.88
	2800.00	1.33	268.75	25	2799.46	-28.57	28.57 S	35.43 W	45.51	231.11	1.22	1.12	-23.76
	2825.00	1.29	269.96	25	2824.46	-28.58	28.58 S	36.00 W	45.96	231.55	0.19	-0.16	4.84
	2850.00	1.33	275.18	25	2849.45	-28.55	28.55 S	36.57 W	46.39	232.02	0.50	0.16	20.88
	2875.00	1.40	275.25	25	2874.44	-28.50	28.50 S	37.16 W	46.83	232.51	0.28	0.28	0.28
	2900.00	1.36	278.87	25	2899.44	-28.43	28.43 S	37.76 W	47.26	233.03	0.38	-0.16	14.48
	2925.00	1.42	281.79	25	2924.43	-28.32	28.32 S	38.35 W	47.67	233.56	0.37	0.24	11.68
	2950.00	1.51	282.64	25	2949.42	-28.18	28.18 S	38.98 W	48.10	234.13	0.37	0.36	3.40
	2975.00	1.42	286.50	25	2974.41	-28.02	28.02 S	39.60 W	48.51	234.71	0.53	-0.36	15.44
	3000.00	1.46	289.32	25	2999.41	-27.83	27.83 S	40.19 W	48.89	235.30	0.33	0.16	11.28



PHOENIX

TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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')
	3025.00	1.51	289.08	25	3024.40	-27.61	27.61 S	40.81 W	49.27	235.91	0.20	0.20	-0.96
	3050.00	1.45	298.57	25	3049.39	-27.36	27.36 S	41.40 W	49.62	236.54	1.01	-0.24	37.96
	3075.00	1.49	290.86	25	3074.38	-27.09	27.09 S	41.98 W	49.96	237.17	0.81	0.16	-30.84
	3100.00	1.52	291.70	25	3099.37	-26.85	26.85 S	42.59 W	50.35	237.77	0.15	0.12	3.36
	3125.00	1.47	298.78	25	3124.36	-26.57	26.57 S	43.18 W	50.70	238.39	0.76	-0.20	28.32
	3150.00	1.45	302.58	25	3149.36	-26.25	26.25 S	43.73 W	51.00	239.02	0.40	-0.08	15.20
	3175.00	1.44	294.54	25	3174.35	-25.95	25.95 S	44.28 W	51.32	239.63	0.81	-0.04	-32.16
	3200.00	1.44	303.82	25	3199.34	-25.64	25.64 S	44.82 W	51.64	240.23	0.93	0.00	37.12
	3225.00	1.36	304.44	25	3224.33	-25.30	25.30 S	45.33 W	51.91	240.83	0.33	-0.32	2.48
	3250.00	1.54	306.15	25	3249.32	-24.93	24.93 S	45.85 W	52.19	241.46	0.74	0.72	6.84
	3275.00	1.60	312.64	25	3274.31	-24.50	24.50 S	46.37 W	52.45	242.15	0.75	0.24	25.96
	3300.00	1.64	318.02	25	3299.30	-24.00	24.00 S	46.87 W	52.66	242.89	0.63	0.16	21.52
	3325.00	1.65	321.06	25	3324.29	-23.45	23.45 S	47.34 W	52.83	243.65	0.35	0.04	12.16
	3350.00	1.71	322.95	25	3349.28	-22.87	22.87 S	47.79 W	52.98	244.42	0.33	0.24	7.56
	3375.00	1.79	326.18	25	3374.27	-22.25	22.25 S	48.23 W	53.11	245.23	0.51	0.32	12.92
	3400.00	1.82	329.76	25	3399.26	-21.58	21.58 S	48.65 W	53.22	246.07	0.47	0.12	14.32
	3425.00	1.89	333.68	25	3424.25	-20.87	20.87 S	49.03 W	53.29	246.94	0.58	0.28	15.68
	3450.00	1.94	336.24	25	3449.23	-20.11	20.11 S	49.38 W	53.32	247.84	0.40	0.20	10.24
	3475.00	1.98	335.68	25	3474.22	-19.33	19.33 S	49.73 W	53.36	248.76	0.18	0.16	-2.24
	3500.00	2.02	336.42	25	3499.20	-18.54	18.54 S	50.08 W	53.40	249.69	0.19	0.16	2.96
	3525.00	2.06	337.12	25	3524.19	-17.72	17.72 S	50.44 W	53.46	250.64	0.19	0.16	2.80
	3550.00	2.08	337.18	25	3549.17	-16.89	16.89 S	50.79 W	53.52	251.61	0.08	0.08	0.24
	3575.00	2.05	337.31	25	3574.15	-16.06	16.06 S	51.13 W	53.60	252.57	0.12	-0.12	0.52
	3600.00	2.19	335.36	25	3599.14	-15.21	15.21 S	51.51 W	53.70	253.55	0.63	0.56	-7.80
	3625.00	2.37	335.04	25	3624.12	-14.31	14.31 S	51.92 W	53.86	254.60	0.72	0.72	-1.28
	3650.00	2.71	331.41	25	3649.09	-13.32	13.32 S	52.42 W	54.09	255.75	1.50	1.36	-14.52
	3675.00	3.11	332.33	25	3674.06	-12.20	12.20 S	53.02 W	54.41	257.04	1.61	1.60	3.68
	3700.00	3.36	329.68	25	3699.02	-10.97	10.97 S	53.71 W	54.82	258.46	1.16	1.00	-10.60
	3725.00	3.49	329.92	25	3723.98	-9.68	9.68 S	54.46 W	55.31	259.93	0.52	0.52	0.96
	3750.00	3.86	330.65	25	3748.92	-8.28	8.28 S	55.25 W	55.87	261.47	1.49	1.48	2.92



PHOENIX

TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co, NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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')
	3775.00	4.03	332.80	25	3773.87	-6.77	6.77 S	56.07 W	56.47	263.12	0.90	0.68	8.60
	3800.00	4.28	330.16	25	3798.80	-5.18	5.18 S	56.93 W	57.17	264.80	1.26	1.00	-10.56
	3825.00	4.37	330.20	25	3823.73	-3.54	3.54 S	57.87 W	57.98	266.50	0.36	0.36	0.16
	3850.00	4.62	331.79	25	3848.65	-1.83	1.83 S	58.82 W	58.85	268.22	1.12	1.00	6.36
	3875.00	4.81	331.92	25	3873.57	-0.02	0.02 S	59.79 W	59.79	269.98	0.76	0.76	0.52
	3900.00	5.05	331.81	25	3898.47	1.88	1.88 N	60.80 W	60.83	271.77	0.96	0.96	-0.44
	3925.00	5.15	331.60	25	3923.38	3.83	3.83 N	61.85 W	61.97	273.55	0.41	0.40	-0.84
	3950.00	5.20	331.94	25	3948.27	5.82	5.82 N	62.92 W	63.19	275.29	0.23	0.20	1.36
	3975.00	5.28	332.11	25	3973.17	7.84	7.84 N	63.99 W	64.47	276.98	0.33	0.32	0.68
	4000.00	5.28	332.07	25	3998.06	9.87	9.87 N	65.07 W	65.81	278.63	0.01	0.00	-0.16
	4025.00	5.30	332.20	25	4022.96	11.91	11.91 N	66.15 W	67.21	280.21	0.09	0.08	0.52
	4050.00	5.36	332.24	25	4047.85	13.96	13.96 N	67.23 W	68.66	281.73	0.24	0.24	0.16
	4075.00	5.36	332.73	25	4072.74	16.03	16.03 N	68.31 W	70.16	283.21	0.18	0.00	1.96
	4100.00	5.27	332.05	25	4097.63	18.09	18.09 N	69.38 W	71.70	284.61	0.44	-0.36	-2.72
	4125.00	5.27	331.74	25	4122.53	20.11	20.11 N	70.46 W	73.28	285.93	0.11	0.00	-1.24
	4150.00	5.25	332.12	25	4147.42	22.13	22.13 N	71.54 W	74.89	287.19	0.16	-0.08	1.52
	4175.00	5.15	331.92	25	4172.32	24.14	24.14 N	72.60 W	76.51	288.39	0.41	-0.40	-0.80
	4200.00	5.09	331.86	25	4197.22	26.10	26.10 N	73.66 W	78.14	289.51	0.24	-0.24	-0.24
	4225.00	5.02	332.00	25	4222.12	28.05	28.05 N	74.69 W	79.78	290.58	0.28	-0.28	0.56
	4250.00	4.95	331.89	25	4247.03	29.96	29.96 N	75.71 W	81.43	291.59	0.28	-0.28	-0.44
	4275.00	4.99	331.84	25	4271.93	31.87	31.87 N	76.73 W	83.09	292.56	0.16	0.16	-0.20
	4300.00	4.95	331.58	25	4296.84	33.78	33.78 N	77.76 W	84.78	293.48	0.18	-0.16	-1.04
	4325.00	4.93	331.58	25	4321.75	35.67	35.67 N	78.79 W	86.49	294.36	0.08	-0.08	0.00
	4350.00	4.89	331.85	25	4346.65	37.56	37.56 N	79.80 W	88.20	295.20	0.18	-0.16	1.08
	4375.00	4.83	331.85	25	4371.56	39.43	39.43 N	80.80 W	89.90	296.01	0.24	-0.24	0.00
	4400.00	4.77	331.65	25	4396.48	41.27	41.27 N	81.79 W	91.61	296.77	0.25	-0.24	-0.80
	4425.00	4.69	331.57	25	4421.39	43.08	43.08 N	82.77 W	93.31	297.50	0.32	-0.32	-0.32
	4450.00	4.58	331.99	25	4446.31	44.86	44.86 N	83.72 W	94.99	298.18	0.46	-0.44	1.68
	4475.00	4.62	331.91	25	4471.23	46.63	46.63 N	84.67 W	96.66	298.84	0.16	0.16	-0.32
	4500.00	4.64	331.89	25	4496.15	48.41	48.41 N	85.62 W	98.36	299.49	0.08	0.08	-0.08



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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)			
	4525.00	4.62	332.06	25	4521.07	50.19	50.19 N	86.57 W	100.07	300.11	0.10	-0.08	0.68
	4550.00	4.63	331.79	25	4545.98	51.97	51.97 N	87.51 W	101.78	300.70	0.10	0.04	-1.08
	4575.00	4.65	331.09	25	4570.90	53.75	53.75 N	88.48 W	103.53	301.28	0.24	0.08	-2.80
	4600.00	4.63	330.81	25	4595.82	55.52	55.52 N	89.46 W	105.29	301.82	0.12	-0.08	-1.12
	4625.00	4.59	329.74	25	4620.74	57.26	57.26 N	90.46 W	107.06	302.33	0.38	-0.16	-4.28
	4650.00	4.54	328.78	25	4645.66	58.97	58.97 N	91.48 W	108.84	302.81	0.37	-0.20	-3.84
	4675.00	4.49	327.55	25	4670.58	60.64	60.64 N	92.51 W	110.62	303.24	0.44	-0.20	-4.92
	4700.00	4.49	326.40	25	4695.51	62.28	62.28 N	93.58 W	112.41	303.65	0.36	0.00	-4.60
	4725.00	4.48	324.53	25	4720.43	63.89	63.89 N	94.69 W	114.23	304.01	0.59	-0.04	-7.48
	4750.00	4.49	324.30	25	4745.35	65.48	65.48 N	95.83 W	116.06	304.35	0.08	0.04	-0.92
	4775.00	4.52	323.95	25	4770.28	67.08	67.08 N	96.98 W	117.91	304.67	0.16	0.12	-1.40
	4800.00	4.35	322.63	25	4795.20	68.63	68.63 N	98.13 W	119.75	304.97	0.79	-0.68	-5.28
	4825.00	4.33	321.49	25	4820.13	70.12	70.12 N	99.30 W	121.56	305.23	0.35	-0.08	-4.56
	4850.00	4.33	322.04	25	4845.06	71.60	71.60 N	100.46 W	123.37	305.48	0.17	0.00	2.20
	4875.00	4.36	321.06	25	4869.99	73.08	73.08 N	101.64 W	125.19	305.72	0.32	0.12	-3.92
	4900.00	4.29	320.28	25	4894.91	74.54	74.54 N	102.84 W	127.01	305.94	0.37	-0.28	-3.12
	4925.00	4.26	320.35	25	4919.84	75.98	75.98 N	104.03 W	128.82	306.14	0.12	-0.12	0.28
	4950.00	4.28	320.72	25	4944.78	77.41	77.41 N	105.21 W	130.62	306.35	0.14	0.08	1.48
	4975.00	4.35	319.79	25	4969.70	78.86	78.86 N	106.41 W	132.45	306.54	0.40	0.28	-3.72
	5000.00	4.41	320.22	25	4994.63	80.32	80.32 N	107.64 W	134.31	306.73	0.27	0.24	1.72
	5025.00	4.44	320.02	25	5019.56	81.80	81.80 N	108.88 W	136.18	306.92	0.13	0.12	-0.80
	5050.00	4.43	319.36	25	5044.48	83.28	83.28 N	110.13 W	138.07	307.10	0.21	-0.04	-2.64
	5075.00	4.30	317.81	25	5069.41	84.70	84.70 N	111.39 W	139.93	307.25	0.70	-0.52	-6.20
	5100.00	3.50	310.67	25	5094.35	85.89	85.89 N	112.59 W	141.62	307.34	3.74	-3.20	-28.56
	5125.00	2.46	307.81	25	5119.32	86.72	86.72 N	113.60 W	142.91	307.36	4.20	-4.16	-11.44
	5150.00	2.21	307.95	25	5144.30	87.35	87.35 N	114.40 W	143.93	307.36	1.00	-1.00	0.56
	5175.00	2.16	309.70	25	5169.28	87.94	87.94 N	115.14 W	144.89	307.37	0.33	-0.20	7.00
	5200.00	2.18	311.57	25	5194.26	88.56	88.56 N	115.86 W	145.83	307.39	0.29	0.08	7.48
	5225.00	2.10	310.20	25	5219.24	89.17	89.17 N	116.57 W	146.76	307.42	0.38	-0.32	-5.48
	5250.00	1.77	317.10	25	5244.23	89.75	89.75 N	117.18 W	147.60	307.45	1.61	-1.32	27.60



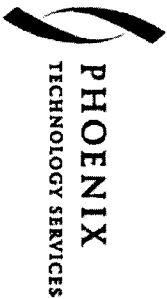
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co, NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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)			
	5275.00	2.11	314.43	25	5269.21	90.35	90.35 N	117.77 W	148.44	307.50	1.41	1.36	-10.68
	5300.00	2.00	317.11	25	5294.20	91.00	91.00 N	118.40 W	149.33	307.55	0.58	-0.44	10.72
	5325.00	1.92	318.70	25	5319.18	91.63	91.63 N	118.97 W	150.17	307.60	0.39	-0.32	6.36
	5350.00	1.81	314.33	25	5344.17	92.22	92.22 N	119.53 W	150.97	307.65	0.72	-0.44	-17.48
	5375.00	1.80	317.83	25	5369.16	92.79	92.79 N	120.07 W	151.75	307.70	0.44	-0.04	14.00
	5400.00	1.82	317.47	25	5394.15	93.37	93.37 N	120.61 W	152.53	307.75	0.09	0.08	-1.44
	5425.00	1.78	318.76	25	5419.13	93.96	93.96 N	121.13 W	153.30	307.80	0.23	-0.16	5.16
	5450.00	1.63	316.54	25	5444.12	94.51	94.51 N	121.63 W	154.03	307.85	0.66	-0.60	-8.88
	5475.00	1.51	316.25	25	5469.11	95.00	95.00 N	122.10 W	154.71	307.88	0.48	-0.48	-1.16
	5500.00	1.44	315.79	25	5494.10	95.47	95.47 N	122.55 W	155.35	307.92	0.28	-0.28	-1.84
	5525.00	1.39	318.40	25	5519.10	95.92	95.92 N	122.97 W	155.95	307.95	0.33	-0.20	10.44
	5550.00	1.25	312.60	25	5544.09	96.33	96.33 N	123.37 W	156.52	307.98	0.77	-0.56	-23.20
	5575.00	1.08	309.83	25	5569.08	96.66	96.66 N	123.75 W	157.03	307.99	0.72	-0.68	-11.08
	5600.00	1.08	312.58	25	5594.08	96.97	96.97 N	124.11 W	157.50	308.00	0.21	0.00	11.00
	5625.00	1.13	314.54	25	5619.08	97.31	97.31 N	124.46 W	157.98	308.02	0.25	0.20	7.84
	5650.00	1.08	310.44	25	5644.07	97.63	97.63 N	124.81 W	158.46	308.03	0.37	-0.20	-16.40
	5675.00	1.06	309.77	25	5669.07	97.93	97.93 N	125.17 W	158.93	308.04	0.09	-0.08	-2.68
	5700.00	1.08	151.86	25	5694.07	97.87	97.87 N	125.24 W	158.94	308.01	8.40	0.08	-631.64
	5725.00	0.92	298.55	25	5719.06	97.76	97.76 N	125.30 W	158.93	307.96	7.67	-0.64	586.76
	5750.00	0.99	290.68	25	5744.06	97.93	97.93 N	125.68 W	159.33	307.93	0.59	0.28	-31.48
	5775.00	0.90	289.99	25	5769.06	98.08	98.08 N	126.07 W	159.72	307.88	0.36	-0.36	-2.76
	5800.00	0.91	286.29	25	5794.05	98.20	98.20 N	126.44 W	160.10	307.83	0.24	0.04	-14.80
	5825.00	0.93	285.09	25	5819.05	98.31	98.31 N	126.83 W	160.47	307.78	0.11	0.08	-4.80
	5850.00	0.77	290.05	25	5844.05	98.42	98.42 N	127.18 W	160.82	307.73	0.70	-0.64	19.84
	5875.00	0.89	278.34	25	5869.05	98.50	98.50 N	127.53 W	161.14	307.68	0.83	0.48	-46.84
	5900.00	0.93	283.01	25	5894.04	98.58	98.58 N	127.92 W	161.50	307.62	0.34	0.16	18.68
	5925.00	0.99	276.96	25	5919.04	98.65	98.65 N	128.33 W	161.87	307.55	0.47	0.24	-24.20
	5950.00	1.02	269.10	25	5944.03	98.67	98.67 N	128.77 W	162.23	307.46	0.56	0.12	-31.44
	5975.00	0.85	267.12	25	5969.03	98.66	98.66 N	129.18 W	162.55	307.37	0.69	-0.68	-7.92
	6000.00	0.97	274.22	25	5994.03	98.67	98.67 N	129.57 W	162.86	307.29	0.66	0.48	28.40



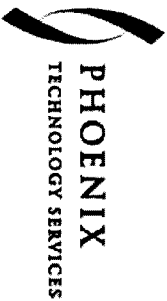
PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
RKB - MSL in feet: 15
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		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	6025.00	1.08	265.95	25	6019.02	98.67	98.67 N	130.02 W	163.22	307.19	0.74	0.44	-33.08
	6050.00	1.04	265.54	25	6044.02	98.63	98.63 N	130.48 W	163.57	307.09	0.16	-0.16	-1.64
	6075.00	0.93	263.45	25	6069.02	98.59	98.59 N	130.91 W	163.88	306.98	0.46	-0.44	-8.36
	6100.00	1.04	263.74	25	6094.01	98.54	98.54 N	131.34 W	164.19	306.88	0.44	0.44	1.16
	6125.00	1.12	268.19	25	6119.01	98.51	98.51 N	131.81 W	164.55	306.77	0.46	0.32	17.80
	6150.00	1.09	257.19	25	6144.00	98.45	98.45 N	132.28 W	164.90	306.66	0.86	-0.12	-44.00
	6175.00	1.24	255.63	25	6169.00	98.33	98.33 N	132.78 W	165.22	306.52	0.61	0.60	-6.24
	6200.00	1.38	252.99	25	6193.99	98.17	98.17 N	133.33 W	165.57	306.37	0.61	0.56	-10.56
	6225.00	1.87	249.25	25	6218.98	97.94	97.94 N	134.00 W	165.97	306.16	2.00	1.96	-14.96
	6250.00	2.41	251.08	25	6243.96	97.63	97.63 N	134.87 W	166.50	305.90	2.18	2.16	7.32
	6275.00	2.67	249.45	25	6268.94	97.25	97.25 N	135.92 W	167.13	305.58	1.08	1.04	-6.52
	6300.00	2.57	252.32	25	6293.91	96.88	96.88 N	137.00 W	167.79	305.27	0.66	-0.40	11.48
	6325.00	2.63	250.71	25	6318.89	96.52	96.52 N	138.07 W	168.46	304.96	0.38	0.24	-6.44
	6350.00	2.69	253.44	25	6343.86	96.16	96.16 N	139.18 W	169.16	304.64	0.56	0.24	10.92
	6375.00	2.46	251.36	25	6368.84	95.82	95.82 N	140.25 W	169.86	304.34	0.99	-0.92	-8.32
	6400.00	2.02	251.74	25	6393.82	95.51	95.51 N	141.17 W	170.45	304.08	1.76	-1.76	1.52
	6425.00	1.88	253.18	25	6418.80	95.26	95.26 N	141.98 W	170.98	303.86	0.59	-0.56	5.76
	6450.00	1.70	249.45	25	6443.79	95.01	95.01 N	142.72 W	171.45	303.65	0.86	-0.72	-14.92
	6475.00	1.58	249.62	25	6468.78	94.76	94.76 N	143.39 W	171.87	303.46	0.48	-0.48	0.68
	6500.00	1.36	244.55	25	6493.77	94.51	94.51 N	143.98 W	172.23	303.28	1.02	-0.88	-20.28
	6525.00	1.41	244.63	25	6518.76	94.25	94.25 N	144.53 W	172.55	303.11	0.20	0.20	0.32
	6550.00	1.32	246.72	25	6543.76	94.00	94.00 N	145.07 W	172.87	302.94	0.41	-0.36	8.36
	6575.00	1.35	240.72	25	6568.75	93.75	93.75 N	145.59 W	173.17	302.78	0.57	0.12	-24.00
	6600.00	1.44	241.57	25	6593.74	93.45	93.45 N	146.13 W	173.46	302.60	0.37	0.36	3.40
	6625.00	1.42	246.02	25	6618.73	93.18	93.18 N	146.69 W	173.78	302.42	0.45	-0.08	17.80
	6650.00	1.28	256.56	25	6643.73	92.99	92.99 N	147.24 W	174.15	302.27	1.14	-0.56	42.16
	6675.00	1.23	274.39	25	6668.72	92.94	92.94 N	147.78 W	174.58	302.17	1.57	-0.20	71.32
	6700.00	1.54	310.67	25	6693.71	93.18	93.18 N	148.30 W	175.15	302.14	3.65	1.24	145.12
	6725.00	1.84	329.35	25	6718.70	93.75	93.75 N	148.76 W	175.84	302.22	2.49	1.20	74.72
	6750.00	1.79	327.20	25	6743.69	94.42	94.42 N	149.18 W	176.55	302.33	0.34	-0.20	-8.60



PHOENIX
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Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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')
	6775.00	2.00	328.73	25	6768.68	95.12	95.12 N	149.62 W	177.29	302.45	0.86	0.84	6.12
	6800.00	2.11	330.14	25	6793.66	95.89	95.89 N	150.07 W	178.09	302.58	0.48	0.44	5.64
	6825.00	2.08	331.44	25	6818.65	96.69	96.69 N	150.52 W	178.90	302.72	0.22	-0.12	5.20
	6850.00	1.93	330.48	25	6843.63	97.46	97.46 N	150.94 W	179.67	302.85	0.61	-0.60	-3.84
	6875.00	1.93	327.86	25	6868.62	98.18	98.18 N	151.37 W	180.42	302.97	0.35	0.00	-10.48
	6900.00	1.67	325.45	25	6893.60	98.83	98.83 N	151.80 W	181.14	303.07	1.08	-1.04	-9.64
	6925.00	1.77	324.90	25	6918.59	99.45	99.45 N	152.23 W	181.84	303.16	0.41	0.40	-2.20
	6950.00	1.80	326.42	25	6943.58	100.09	100.09 N	152.67 W	182.56	303.25	0.22	0.12	6.08
	6975.00	1.57	320.39	25	6968.57	100.68	100.68 N	153.11 W	183.25	303.33	1.16	-0.92	-24.12
	7000.00	1.57	307.42	25	6993.56	101.16	101.16 N	153.60 W	183.92	303.37	1.42	0.00	-51.88
	7025.00	1.47	292.40	25	7018.55	101.49	101.49 N	154.17 W	184.57	303.36	1.64	-0.40	-60.08
	7050.00	1.45	285.34	25	7043.54	101.69	101.69 N	154.77 W	185.19	303.31	0.72	-0.08	-28.24
	7075.00	1.63	290.85	25	7068.53	101.90	101.90 N	155.41 W	185.84	303.25	0.93	0.72	22.04
	7100.00	1.56	274.16	25	7093.52	102.05	102.05 N	156.08 W	186.48	303.18	1.87	-0.28	-66.76
	7125.00	1.84	273.24	25	7118.51	102.10	102.10 N	156.82 W	187.13	303.07	1.13	1.12	-3.68
	7150.00	1.90	280.20	25	7143.50	102.20	102.20 N	157.63 W	187.86	302.96	0.94	0.24	27.84
	7175.00	1.98	274.36	25	7168.49	102.30	102.30 N	158.46 W	188.62	302.85	0.85	0.32	-23.36
	7200.00	2.09	275.81	25	7193.47	102.38	102.38 N	159.35 W	189.40	302.72	0.49	0.44	5.80
	7225.00	2.02	269.36	25	7218.45	102.42	102.42 N	160.24 W	190.18	302.59	0.97	-0.28	-25.80
	7250.00	1.95	267.32	25	7243.44	102.40	102.40 N	161.11 W	190.90	302.44	0.40	-0.28	-8.16
	7275.00	1.92	269.45	25	7268.42	102.38	102.38 N	161.95 W	191.60	302.30	0.31	-0.12	8.52
	7300.00	1.96	270.26	25	7293.41	102.37	102.37 N	162.80 W	192.31	302.16	0.19	0.16	3.24
	7325.00	2.07	275.84	25	7318.39	102.42	102.42 N	163.67 W	193.08	302.04	0.90	0.44	22.32
	7350.00	2.04	276.92	25	7343.38	102.52	102.52 N	164.57 W	193.89	301.92	0.20	-0.12	4.32
	7375.00	2.07	276.83	25	7368.36	102.63	102.63 N	165.46 W	194.70	301.81	0.12	0.12	-0.36
	7400.00	1.86	276.45	25	7393.35	102.73	102.73 N	166.31 W	195.48	301.70	0.84	-0.84	-1.52
	7425.00	1.84	276.48	25	7418.33	102.82	102.82 N	167.11 W	196.21	301.60	0.08	-0.08	0.12
	7450.00	1.77	273.68	25	7443.32	102.89	102.89 N	167.89 W	196.91	301.50	0.45	-0.28	-11.20
	7475.00	1.78	271.91	25	7468.31	102.93	102.93 N	168.67 W	197.59	301.39	0.22	0.04	-7.08
	7500.00	1.90	273.19	25	7493.30	102.96	102.96 N	169.47 W	198.29	301.28	0.51	0.48	5.12



PHOENIX
TECHNOLOGY SERVICES

Company: EOG
Well: North Dagger Draw Upper Penn 127
Location: Eddy Co., NM
Rig: Pulling Unit

Job Number: 61206
Grid Corr.: 0.10
Lat: 32.63
Long: -104.52

Calculation Method: Minimum Curvature
Proposed Azimuth: 15
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)			
	7525.00	1.94	272.20	25	7518.28	103.00	103.00 N	170.30 W	199.03	301.17	0.21	0.16	-3.96
	7550.00	1.88	272.70	25	7543.27	103.04	103.04 N	171.14 W	199.76	301.05	0.25	-0.24	2.00

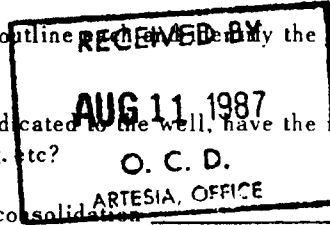
MEXICO OIL CONSERVATION COMMISS
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator Yates Petroleum Corporation			Lease Dagger ZW		Well No. 1
Unit Letter K	Section 30	Township 19S	Range 25E	County Eddy	
Actual Footage Location of Well: 1980' feet from the South line and 1980 feet from the West line					
Ground Level Elev. 3564 GL	Producing Formation CISCO-CANYON	Pool UNDES North Dagger Draw Upper Penn	Dedicated Acreage: 160 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?
☐ Yes ☒ No If answer is "yes," type of consolidation _____



If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

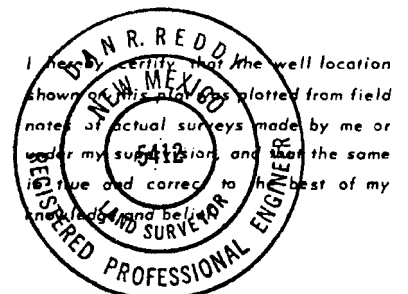
Clifton R. May

Name
Clifton R. May

Position
Regulatory Agent

Company
Yates Petroleum Corporation

Date
August 11, 1987



Date Surveyed
August 10, 1987

Registered Professional Engineer
and/or Land Surveyor

Dan R. Reddy
Certificate No.
NM PE&LS NO. 5412

