



PHOENIX
TECHNOLOGY SERVICES

December 6, 2017

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

Dear District 2 - Artesia

Re: EOG Resources
Federal CW #1
Eddy Co., New Mexico
API #30-015-20968
Job No. 62099

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 12 2017

RECEIVED

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	
Noe Garza	1	0	2,193	12/6/17	12/6/17	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



PHOENIX
TECHNOLOGY SERVICES

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

Company: EOG

Job #: 62099

Well Name: Federal CW # 1

County/State: Eddy Co., New Mexico

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-20968

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 (°)
2017-12-06	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2017-12-06	2193	2.35	330.57

Projected TD Survey

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

Grid Correction
0.11

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

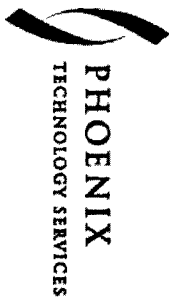
To the best of my knowledge I certify this survey data to be correct and true

Date:

12-06-17

Print Name: Noe Garza

Signature:



Company: EOG
Well: Federal CW # 1
Location: Eddy Co., New Mexico
Rig: Pulling Unit

Job Number: 62099
Grid Corr.: 0.11
Lat: 32.68
Long: -104.54

Date: 12-06-17
Calculation Method: Minimum Curvature
Proposed Azimuth: Ground
RKB - MSL in feet: Surface
Tie Info:

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													
FIELD COPY, NON-DEFINITIVE													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.19	204.58	100	100.00	-0.15	0.15 S	0.07 W	0.17	204.58	0.19	0.19	204.58
	200.00	0.43	253.38	100	200.00	-0.41	0.41 S	0.50 W	0.64	230.58	0.34	0.24	48.80
	300.00	0.76	211.59	100	299.99	-1.08	1.08 S	1.20 W	1.62	228.09	0.52	0.33	-41.79
	400.00	1.29	272.12	100	399.98	-1.60	1.60 S	2.68 W	3.12	239.06	1.13	0.53	60.53
	500.00	1.32	266.00	100	499.95	-1.64	1.64 S	4.95 W	5.22	251.64	0.14	0.03	-6.12
	600.00	1.19	291.61	100	599.93	-1.34	1.34 S	7.07 W	7.19	259.25	0.57	-0.13	25.61
	700.00	2.16	300.58	100	699.89	0.00	0.00 N	9.65 W	9.65	270.00	1.00	0.97	8.97
	800.00	2.27	328.42	100	799.81	2.65	2.65 N	12.31 W	12.59	282.13	1.07	0.11	27.84
	900.00	2.34	315.12	100	899.73	5.78	5.78 N	14.79 W	15.88	291.34	0.54	0.07	-13.30
	1000.00	3.01	26.33	100	999.65	9.58	9.58 N	15.07 W	17.85	302.45	3.16	0.67	-288.79
	1100.00	2.64	326.96	100	1099.55	13.87	13.87 N	15.16 W	20.54	312.45	2.82	-0.37	300.63
	1200.00	2.23	318.69	100	1199.46	17.26	17.26 N	17.70 W	24.72	314.28	0.54	-0.41	-8.27
	1300.00	2.96	320.40	100	1299.35	20.71	20.71 N	20.63 W	29.23	315.11	0.73	0.73	1.71
	1400.00	2.23	325.64	100	1399.25	24.30	24.30 N	23.37 W	33.72	316.12	0.77	-0.73	5.24
	1500.00	2.93	319.95	100	1499.15	27.87	27.87 N	26.11 W	38.19	316.86	0.74	0.70	-5.69
	1600.00	2.32	325.00	100	1599.04	31.48	31.48 N	28.92 W	42.75	317.43	0.65	-0.61	5.05
	1700.00	2.84	316.69	100	1698.94	34.94	34.94 N	31.78 W	47.23	317.71	0.64	0.52	-8.31
	1800.00	2.18	323.94	100	1798.85	38.28	38.28 N	34.60 W	51.60	317.89	0.73	-0.66	7.25
	1900.00	2.53	333.33	100	1898.76	41.79	41.79 N	36.71 W	55.62	318.70	0.52	0.35	9.39
	2000.00	2.55	331.71	100	1998.66	45.72	45.72 N	38.75 W	59.94	319.72	0.07	0.02	-1.62
	2100.00	2.50	318.28	100	2098.57	49.31	49.31 N	41.26 W	64.29	320.08	0.59	-0.05	-13.43
	2193.00	2.35	330.57	93	2191.48	52.48	52.48 N	43.55 W	68.20	320.32	0.58	-0.16	13.22

NE MEXICO OIL CONSERVATION COMMISSION
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.

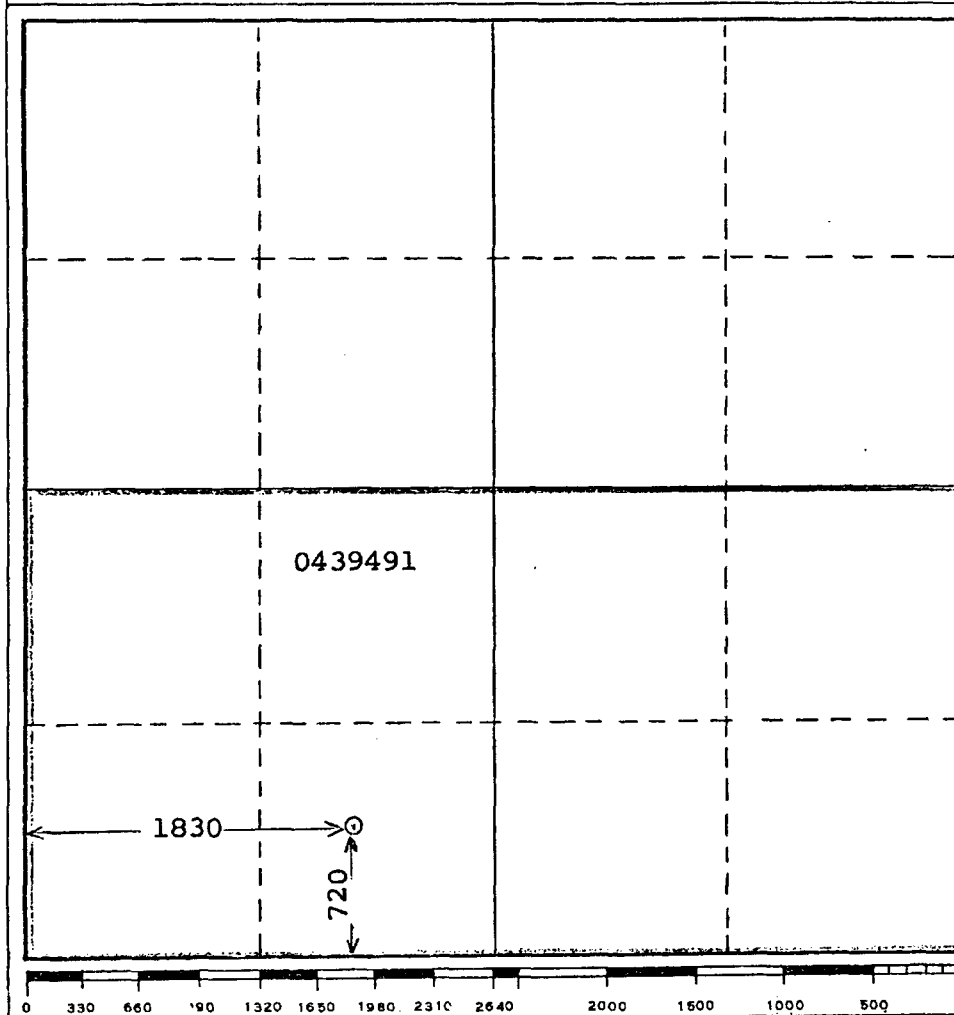
Operator Yates Petroleum Corporation			Lease Federal "CW"		Well No. 1
Unit Letter N	Section 1	Township 19S	Range 24E	County Eddy	
Actual Footage Location of Well: 1830 feet from the West line and 720 feet from the South line					
Ground Level Elev. 3676'	Producing Formation Morrow		Pool Wildcat Undesignated	Dedicated Acreage: 320 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 each 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 Communitization

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.

Eddie M. Mahfood
Name

Eddie M. Mahfood

Position

Engineer

Company

Yates Petroleum Corp.

Date

8-29-73

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

8-29-73

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Eddie M. Mahfood

Certificate No.