



**PHOENIX**  
**TECHNOLOGY SERVICES**

January 12, 2018

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

**WELL OIL CONSERVATION**  
**ARTESIA DISTRICT**  
**JAN 16 2018**

Dear District 2 - Artesia

**RECEIVED**

Re: EOG Resources  
Johnston BE #1  
Eddy Co., New Mexico  
API #30-015-20054  
Job No. 61249

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	6,900	5/11/17	5/11/17	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



**PHOENIX**  
TECHNOLOGY SERVICES

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

Company: EOG

Job #: 61249

Well Name: Johnston BE # 1

County/State: Eddy Co., New Mexico

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-20054

## 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 (°)
2017-05-11	0	0	0

## Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2017-05-11	6900	0.35	84.08

## Projected TD Survey

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

Grid Correction
0.09

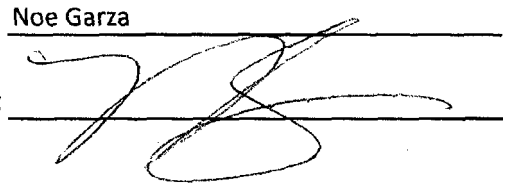
Gyro Operator: Phoenix Technology Services USA Ltd.

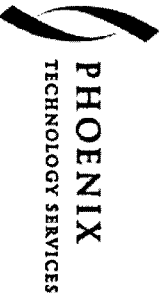
Gyro Supervisor: Angel Guebara

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

Date: 05-11-17

Print Name: Noe Garza

Signature: 



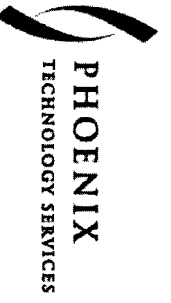
Company: EOG  
 Well: Johnston BE # 1  
 Location: Eddy Co., New Mexico  
 Rig: Pulling Unit

Job Number: 61249  
 Grid Corr.: 0.90  
 Lat: 32.682125  
 Long: -104.499388  
 Grid Ref: NAD 83

Date: 05-10-17  
 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 N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
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FIELD COPY, NON-DEFINITIVE													
Enter Tie-In Survey on Line 10													
TIE IN	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyro	100.00	0.36	72.27	100	100.00	0.10	0.10 N	0.30 E	0.31	72.27	0.36	0.36	72.27
	200.00	0.63	100.71	100	200.00	0.09	0.09 N	1.14 E	1.14	85.52	0.36	0.27	28.44
	300.00	0.89	54.88	100	299.99	0.43	0.43 N	2.31 E	2.35	79.38	0.64	0.26	-45.83
	400.00	0.18	3.75	100	399.98	1.04	1.04 N	2.96 E	3.14	70.68	0.79	-0.71	-51.13
	500.00	0.07	92.56	100	499.98	1.19	1.19 N	3.03 E	3.26	68.54	0.19	-0.11	88.81
	600.00	0.11	140.39	100	599.98	1.11	1.11 N	3.15 E	3.34	70.53	0.08	0.04	47.83
	700.00	0.41	79.37	100	699.98	1.11	1.11 N	3.57 E	3.73	72.76	0.37	0.30	-61.02
	800.00	0.42	212.74	100	799.98	0.86	0.86 N	3.72 E	3.82	76.92	0.76	0.01	133.37
	900.00	0.46	200.60	100	899.98	0.18	0.18 N	3.38 E	3.38	86.94	0.10	0.04	-12.14
	1000.00	0.43	163.28	100	999.97	-0.55	0.55 S	3.35 E	3.39	99.41	0.29	-0.03	-37.32
	1100.00	0.36	108.07	100	1099.97	-1.01	1.01 S	3.75 E	3.89	105.08	0.37	-0.07	-55.21
	1200.00	0.64	37.88	100	1199.97	-0.67	0.67 S	4.39 E	4.45	98.64	0.62	0.28	-70.19
	1300.00	0.68	64.61	100	1299.96	0.03	0.03 N	5.27 E	5.27	89.71	0.31	0.04	26.73
	1400.00	0.45	9.71	100	1399.96	0.67	0.67 N	5.88 E	5.91	83.51	0.56	-0.23	-54.90
	1500.00	0.58	309.93	100	1499.96	1.38	1.38 N	5.55 E	5.72	76.04	0.53	0.13	300.22
	1600.00	0.54	75.74	100	1599.95	1.82	1.82 N	5.62 E	5.91	72.05	1.00	-0.04	-234.19
	1700.00	0.78	82.67	100	1699.95	2.02	2.02 N	6.75 E	7.05	73.32	0.25	0.24	6.93
	1800.00	0.73	66.28	100	1799.94	2.37	2.37 N	8.01 E	8.36	73.54	0.22	-0.05	-16.39
	1900.00	0.21	11.90	100	1899.93	2.80	2.80 N	8.63 E	9.08	72.01	0.63	-0.52	-54.38
	2000.00	0.22	74.54	100	1999.93	3.03	3.03 N	8.86 E	9.36	71.09	0.22	0.01	62.64
	2100.00	0.27	201.80	100	2099.93	2.87	2.87 N	8.95 E	9.40	72.25	0.44	0.05	127.26
	2200.00	0.34	20.08	100	2199.93	2.93	2.93 N	8.97 E	9.43	71.93	0.61	0.07	-181.72
	2300.00	0.46	48.26	100	2299.93	3.47	3.47 N	9.37 E	9.99	69.67	0.23	0.12	28.18
	2400.00	0.51	77.27	100	2399.93	3.84	3.84 N	10.10 E	10.81	69.20	0.25	0.05	29.01
	2500.00	0.34	101.07	100	2499.92	3.88	3.88 N	10.83 E	11.50	70.30	0.24	-0.17	23.80
	2600.00	0.48	60.59	100	2599.92	4.03	4.03 N	11.49 E	12.17	70.68	0.31	0.14	-40.48
	2700.00	0.49	87.13	100	2699.92	4.25	4.25 N	12.28 E	12.99	70.89	0.22	0.01	26.54
	2800.00	0.26	84.06	100	2799.92	4.30	4.30 N	12.93 E	13.63	71.61	0.23	-0.23	-3.07



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

Job Number: 61249  
Grid Corr.: 0.90  
Lat: 32.682125  
Long: -104.499388  
Grid Ref: NAD 83

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 N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	2900.00	0.44	90.90	100	2899.91	4.32	4.32 N	13.54 E	14.21	72.32	0.18	0.18	6.84
	3000.00	0.45	116.96	100	2999.91	4.13	4.13 N	14.27 E	14.86	73.85	0.20	0.01	26.06
	3100.00	0.19	100.18	100	3099.91	3.92	3.92 N	14.79 E	15.30	75.13	0.27	-0.26	-16.78
	3200.00	0.16	227.76	100	3199.91	3.80	3.80 N	14.85 E	15.33	75.64	0.31	-0.03	127.58
	3300.00	0.31	294.36	100	3299.91	3.82	3.82 N	14.50 E	14.99	75.24	0.29	0.15	66.60
	3400.00	0.67	261.29	100	3399.90	3.84	3.84 N	13.67 E	14.20	74.30	0.44	0.36	-33.07
	3500.00	0.43	244.85	100	3499.90	3.59	3.59 N	12.75 E	13.25	74.26	0.28	-0.24	-16.44
	3600.00	0.71	231.03	100	3599.89	3.05	3.05 N	11.93 E	12.32	75.68	0.31	0.28	-13.82
	3700.00	0.40	194.56	100	3699.89	2.32	2.32 N	11.36 E	11.60	78.47	0.46	-0.31	-36.47
	3800.00	0.79	252.95	100	3799.89	1.78	1.78 N	10.62 E	10.76	80.49	0.67	0.39	58.39
	3900.00	1.06	261.43	100	3899.87	1.44	1.44 N	9.04 E	9.16	80.97	0.30	0.27	8.48
	4000.00	0.64	255.86	100	3999.86	1.16	1.16 N	7.59 E	7.68	81.28	0.43	-0.42	-5.57
	4100.00	0.61	225.69	100	4099.86	0.66	0.66 N	6.66 E	6.70	84.38	0.33	-0.03	-30.17
	4200.00	0.49	299.70	100	4199.85	0.50	0.50 N	5.91 E	5.93	85.21	0.67	-0.12	74.01
	4300.00	0.87	329.76	100	4299.84	1.36	1.36 N	5.16 E	5.34	75.20	0.51	0.38	30.06
	4400.00	0.78	331.08	100	4399.83	2.61	2.61 N	4.45 E	5.16	59.54	0.09	-0.09	1.32
	4500.00	0.94	332.61	100	4499.82	3.94	3.94 N	3.74 E	5.43	43.52	0.16	0.16	1.53
	4600.00	1.25	349.08	100	4599.80	5.74	5.74 N	3.16 E	6.55	28.81	0.44	0.31	16.47
	4700.00	0.57	330.07	100	4699.79	7.24	7.24 N	2.70 E	7.73	20.46	0.73	-0.68	-19.01
	4800.00	0.72	325.61	100	4799.79	8.19	8.19 N	2.10 E	8.45	14.37	0.16	0.15	-4.46
	4900.00	0.43	294.87	100	4899.78	8.87	8.87 N	1.40 E	8.98	8.99	0.41	-0.29	-30.74
	5000.00	1.04	17.42	100	4999.77	9.89	9.89 N	1.33 E	9.98	7.68	1.07	0.61	-277.45
	5100.00	1.49	359.19	100	5099.75	12.06	12.06 N	1.59 E	12.16	7.50	0.60	0.45	341.77
	5200.00	1.73	9.55	100	5199.71	14.84	14.84 N	1.82 E	14.96	6.99	0.38	0.24	-349.64
	5300.00	1.89	358.62	100	5299.66	17.98	17.98 N	2.03 E	18.10	6.44	0.38	0.16	349.07
	5400.00	1.55	11.34	100	5399.62	20.96	20.96 N	2.26 E	21.08	6.15	0.51	-0.34	-347.28
	5500.00	1.45	3.13	100	5499.58	23.55	23.55 N	2.59 E	23.69	6.28	0.24	-0.10	-8.21
	5600.00	1.03	19.37	100	5599.56	25.66	25.66 N	2.96 E	25.83	6.58	0.54	-0.42	16.24
	5700.00	1.31	8.26	100	5699.54	27.64	27.64 N	3.42 E	27.85	7.06	0.36	0.28	-11.11
	5800.00	0.97	20.80	100	5799.52	29.56	29.56 N	3.89 E	29.81	7.49	0.42	-0.34	12.54
	5900.00	1.20	23.13	100	5899.50	31.31	31.31 N	4.60 E	31.65	8.35	0.23	0.23	2.33



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

Job Number: 61249  
Grid Corr.: 0.90  
Lat: 32.682125  
Long: -104.499388  
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		Distance (ft)	Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)		Angle (deg)	Severity (d/100')			
	6000.00	1.09	7.88	100	5999.48	33.22	33.22 N	5.14 E	33.61	8.80	0.32	-0.11	-15.25	
	6100.00	1.30	25.52	100	6099.46	35.18	35.18 N	5.76 E	35.65	9.30	0.42	0.21	17.64	
	6200.00	0.88	24.31	100	6199.44	36.91	36.91 N	6.56 E	37.49	10.08	0.42	-0.42	-1.21	
	6300.00	1.06	22.41	100	6299.43	38.46	38.46 N	7.23 E	39.14	10.65	0.18	0.18	-1.90	
	6400.00	0.74	26.29	100	6399.41	39.90	39.90 N	7.87 E	40.67	11.16	0.33	-0.32	3.88	
	6500.00	0.85	42.42	100	6499.40	41.02	41.02 N	8.66 E	41.93	11.92	0.25	0.11	16.13	
	6600.00	0.38	37.52	100	6599.40	41.83	41.83 N	9.36 E	42.87	12.61	0.47	-0.47	-4.90	
	6700.00	0.62	49.91	100	6699.39	42.44	42.44 N	9.98 E	43.60	13.23	0.26	0.24	12.39	
	6800.00	0.28	47.46	100	6799.39	42.96	42.96 N	10.57 E	44.24	13.82	0.34	-0.34	-2.45	
	6900.00	0.35	84.08	100	6899.39	43.16	43.16 N	11.05 E	44.55	14.37	0.21	0.07	36.62	

RECEIVED

NEW MEXICO OIL CONSERVATION COMM. ON  
WELL LOCATION AND ACREAGE DEDICATION PLAT

JUL 18 1972

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

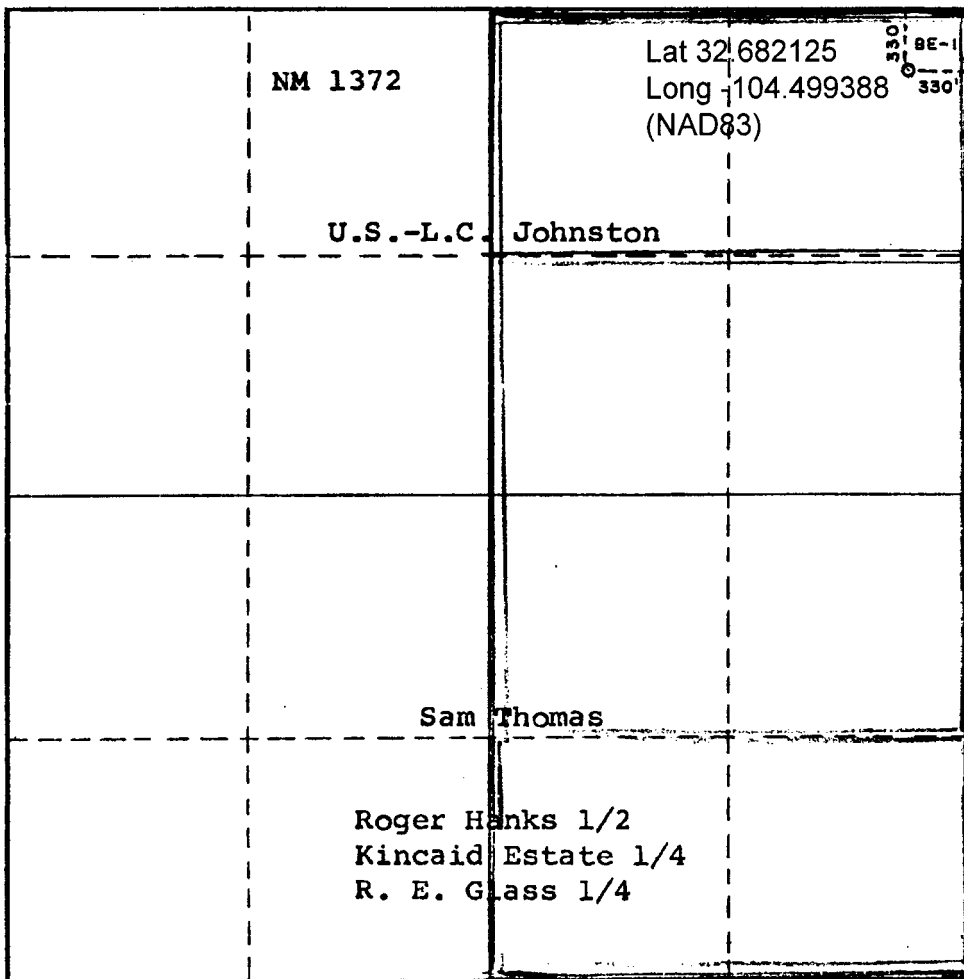
All distances must be from the outer boundaries of the Section.

Operator <b>Yates Petroleum Corporation</b>		Lease <b>Johnston "BE"</b>		Well No. <b>O. C. [ ] ARTESIA, OFFICE 1</b>	
Unit Letter <b>A</b>	Section <b>8</b>	Township <b>19S</b>	Range <b>25E</b>	County <b>Eddy</b>	
Actual Footage Location of Well: <b>330</b> feet from the <b>North</b> line and <b>330</b> feet from the <b>East</b> line					
Ground Level Elev: <b>3563'</b>	Producing Formation <b>Morrow</b>		Pool <b>Boyd Morrow</b>	Dedicated Acreage: <b>320</b> 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 Force-pooling, OCC Order #  
R-4436  
 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 Pet. Corporation**  
 Date  
**7-18-72**

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.

**Refer to original Plat**

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_