



NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 09 2017

RECEIVED

August 14, 2017

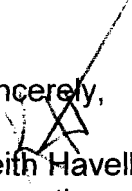
Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: **Burkett 16 State No. 012H**

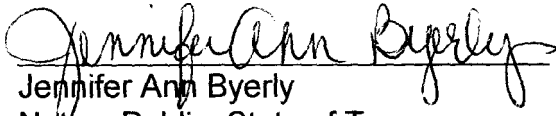
30-015-44268

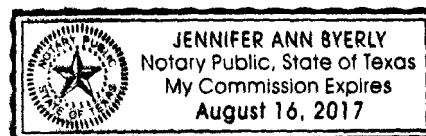
Please find enclosed a copy of the survey from 0' to 1773' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 14th day of August,
A.D., 2017, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





SURVEY

Company: COG OPERATING
Lease/Well: BURKETT 16 STATE/012H
Rig Name: SILVER OAK 3
State/County: NEW MEXICO/EDDY
VS-Azi: 0.00 Degrees
Latitude: 32.83762, Longitude: -103.88220
Grid North = True North -0.24 degs (NAD 27)
Grid Correction Applied = -0.24 degs

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Depth Reference : RKB = 18 FEET

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: e-line gyro-de_01.ut
Minimum Curvature Method
Report Date/Time: 8/14/2017 / 13:11

VES Survey International
Midland, TX
432-563-5444

Surveyor: Christopher Hair
Burkett 16 State No 012H / API 30-015-44268

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.44	268.27	100.00	-0.01	-0.39	-0.01	0.39	268.27	0.44
200.00	0.32	243.66	200.00	-0.15	-1.02	-0.15	1.03	261.78	0.20
300.00	0.22	237.32	300.00	-0.38	-1.44	-0.38	1.49	255.34	0.11
400.00	0.41	252.93	399.99	-0.58	-1.94	-0.58	2.02	253.24	0.20
500.00	0.46	196.96	499.99	-1.08	-2.40	-1.08	2.63	245.82	0.41
600.00	0.60	192.90	599.99	-1.98	-2.63	-1.98	3.29	233.11	0.14
700.00	0.61	201.33	699.98	-2.98	-2.94	-2.98	4.19	224.60	0.09
800.00	0.47	198.54	799.98	-3.87	-3.27	-3.87	5.07	220.17	0.15
900.00	0.72	175.81	899.97	-4.89	-3.35	-4.89	5.93	214.46	0.34
1000.00	0.82	167.97	999.96	-6.21	-3.16	-6.21	6.97	206.95	0.15
1100.00	1.07	177.84	1099.95	-7.85	-2.97	-7.85	8.39	200.76	0.30
1200.00	0.94	179.79	1199.93	-9.60	-2.94	-9.60	10.04	197.00	0.13
1300.00	0.88	117.00	1299.92	-10.78	-2.25	-10.78	11.01	191.77	0.95
1400.00	0.93	80.25	1399.91	-10.99	-0.76	-10.99	11.02	183.96	0.57
1500.00	1.36	70.69	1499.89	-10.46	1.16	-10.46	10.53	173.68	0.48
1600.00	1.41	78.74	1599.86	-9.83	3.49	-9.83	10.43	160.44	0.20

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1700.00	1.67	99.05	1699.83	-9.82	6.14	-9.82	11.58	147.99	0.60
1773.00	1.69	91.86	1772.80	-10.02	8.26	-10.02	12.99	140.48	0.29



VES Survey International
Midland, TX
432-563-5444
Surveyor: Christopher Hair
Burkett 16 State No 012H / API 30-015-44268

VES SURVEY
INTERNATIONAL

0

Depth=0.0, Inc=0.0, AzG=0.0

-S/+N

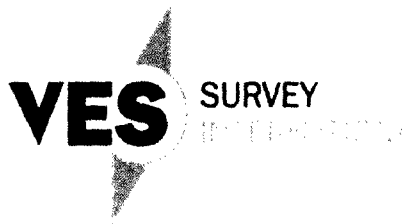
Depth=1773.0, Inc=1.7, AzG=91.9

-20

0

-W/+E

20



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I Christopher Hair certify that I am employed by VES Survey International. That I did on the day(s) of 08/08/17 through 08/08/17 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 1,773.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of COG Operating for the Burkett 16 State Well # 12H API # 30-015-44268 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by VES Survey International.

A handwritten signature in cursive script, appearing to read "Chris Hair", is written over a horizontal line.

Christopher Hair
Service Technician
VES Survey International