

State Lease - 0 copies  
Fee Lease - 5 copies  
District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
1301 W Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.  
30-015-30727  
5. Indicate Type of Lease  
STATE  FEE   
State Oil & Gas Lease No. E-4201

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. Type of Well:  
OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. Type of Completion:  
NEW  WORK  DEEPEN  PLUG  DIFF. WELL OVER  BACK RESVR.  OTHER \_\_\_\_\_

2. Name of Operator  
COG Operating LLC

3. Address of Operator  
550 W. Texas Ave., Suite 1300 Midland, TX 79701

7. Lease Name or Unit Agreement Name  
Mesquite State

8. Well No.  
5

9. Pool name or Wildcat  
Empire; Yeso, East 96610

4. Well Location  
Unit Letter K : 1650 Feet From The South Line and 2310 Feet From The West Line  
Section 20 Township 17S Range 29E NMPM Eddy County

10. Date Spudded 11/02/08 11. Date T.D. Reached 10/25/08 12. Date Compl. (Ready to Prod.) 12/13/08 13. Elevations (DF& RKB, RT, GR, etc.) 3633' GR 14. Elev. Casinghead

15. Total Depth 5420 16. Plug Back T.D. 5336 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools Cable Tools Yes

19. Producing Interval(s), of this completion - Top, Bottom, Name 4970 - 5150 - Yeso 20. Was Directional Survey Made No

21. Type Electric and Other Logs Run **Compensated Neutron / CCL** 22. Was Well Cored No

23. **CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	54#	363	17 1/2	350 sxs	None
8-5/8	24#	823	12 1/4	425 sxs	None
5-1/2	15.5#	4313'	7 7/8	750 sxs	None
4	11.6#	4150'	4 3/4	110 sxs	None

24. **LINER RECORD** 25. **TUBING RECORD**

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8	4911	

26. Perforation record (interval, size, and number)  
3878 - 4160 Existing OPEN  
4430 - 4630, 32 holes, 2 SPF OPEN  
4730 - 4930, 32 holes, 2 SPF OPEN  
5030 - 5230', 48 holes 2 SPF OPEN

27. **ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4430 - 4630	Az w/ 60 BBLS 15% acid. Frac w/183,157# sd.
4730 - 4930	Az w/ 60 BBLS 15% acid. Frac w/183,157# sd.
5030 - 5230	Az w/ 60 BBLS 15% acid. Frac w/183,157# sd.

28. **PRODUCTION**

Date First Production 12/13/08 Production Method (Flowing, gas lift, pumping - Size and type pump) 2" x 1 1/2" x 16' RHTC Pump Well Status (Prod. or Shut-in) Producing

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
12/22/08	24			1	0	12	0

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)
						39.1

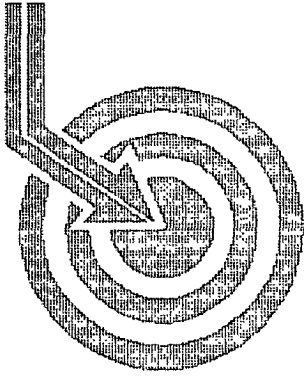
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold Test Witnessed By Kent Greenway

30. List Attachments  
Logs & Deviation Survey to be mailed

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

Signature *Phyllis A. Edwards* Printed Name Phyllis A. Edwards Title Regulatory Analyst Date 2/2/09  
E-mail Address pedwards@conchoresources.com





# Scientific Drilling

## COG RESOURCES

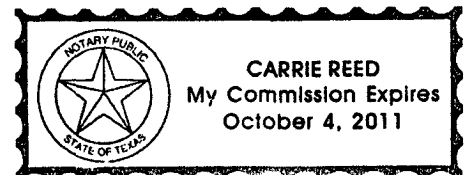
Field: East Empire Yeso  
Site: Eddy County, NM  
Well: Mesquite State #5  
Wellpath: VH - Job #32K1108912  
Survey: 11/14/08

This survey is correct to the best of my knowledge  
and is supported by actual field data.

.....*L. Wharton*..... Company Representative

Notorized this date 22nd of December, 2008.

*Carrie Reed*  
Notary Signature  
County of Midland  
State of Texas





# Scientific Drilling International Survey Report

<b>Company:</b> COG RESOURCES	<b>Date:</b> 12/17/2008	<b>Time:</b> 10:31:03	<b>Page:</b> 1
<b>Field:</b> East Empire Yeso	<b>Co-ordinate(NE) Reference:</b> Site: Eddy County, NM, Grid North		
<b>Site:</b> Eddy County, NM	<b>Vertical (TVD) Reference:</b> SITE 0.0		
<b>Well:</b> Mesquite State #5	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,290.28Az)		
<b>Wellpath:</b> VH - Job #32K1-108912	<b>Survey Calculation Method:</b> Minimum Curvature	<b>Db:</b> Sybase	

<b>Survey:</b> 11/14/08	<b>Start Date:</b> 11/14/2008	
KSRG 0'-5413'		
<b>Company:</b> Scientific Drilling Internatio	<b>Engineer:</b> Melendez w/GeoGyro	
<b>Tool:</b> Keeper,Keeper Gyro	<b>Tied-to:</b> From Surface	

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	CisD ft	CisA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.41	21.54	100.00	-0.01	0.33	0.13	0.41	0.36	21.54
200.00	0.52	39.64	200.00	-0.17	1.02	0.55	0.18	1.16	28.55
300.00	0.67	28.48	299.99	-0.40	1.88	1.12	0.19	2.19	30.82
400.00	0.83	15.17	399.98	-0.42	3.09	1.59	0.24	3.48	27.20
500.00	0.69	10.23	499.97	-0.25	4.38	1.89	0.15	4.77	23.27
600.00	0.70	358.38	599.97	0.08	5.59	1.97	0.14	5.92	19.47
700.00	0.62	3.10	699.96	0.47	6.74	1.99	0.10	7.02	16.43
800.00	0.67	3.45	799.95	0.80	7.86	2.05	0.05	8.12	14.63
900.00	0.60	3.48	899.95	1.12	8.97	2.12	0.07	9.21	13.29
1000.00	0.60	344.87	999.94	1.58	10.00	2.01	0.19	10.20	11.39
1100.00	0.66	336.22	1099.94	2.28	11.03	1.64	0.11	11.15	8.48
1200.00	0.49	327.95	1199.93	3.02	11.92	1.19	0.19	11.98	5.68
1300.00	0.45	299.59	1299.93	3.74	12.47	0.62	0.23	12.49	2.83
1400.00	0.65	286.86	1399.92	4.70	12.83	-0.27	0.23	12.83	358.81
1500.00	0.61	270.46	1499.92	5.77	13.00	-1.34	0.18	13.07	354.10
1600.00	0.81	266.78	1599.91	6.91	12.97	-2.58	0.21	13.22	348.74
1700.00	1.08	273.12	1699.90	8.46	12.98	-4.23	0.29	13.65	341.96
1800.00	1.29	278.18	1799.87	10.46	13.19	-6.28	0.23	14.61	334.53
1900.00	1.34	278.42	1899.85	12.71	13.52	-8.55	0.05	16.00	327.68
2000.00	1.46	283.50	1999.82	15.12	13.99	-10.95	0.17	17.76	321.95
2100.00	1.41	280.55	2099.79	17.60	14.51	-13.40	0.09	19.75	317.29
2200.00	1.37	284.00	2199.76	20.00	15.03	-15.77	0.09	21.78	313.62
2300.00	1.25	283.97	2299.73	22.27	15.58	-17.98	0.12	23.79	310.90
2400.00	1.11	294.58	2399.71	24.32	16.24	-19.92	0.26	25.71	309.19
2500.00	1.06	301.02	2499.69	26.19	17.12	-21.60	0.13	27.56	308.41
2600.00	0.91	303.37	2599.68	27.88	18.04	-23.05	0.16	29.27	308.04
2700.00	0.80	280.33	2699.67	29.34	18.60	-24.40	0.36	30.68	307.31
2800.00	0.88	273.57	2799.66	30.76	18.77	-25.86	0.13	31.95	305.98
2900.00	0.88	271.90	2899.64	32.22	18.85	-27.39	0.03	33.25	304.53
3000.00	0.90	272.26	2999.63	33.70	18.90	-28.94	0.02	34.57	303.15
3100.00	0.78	273.80	3099.62	35.10	18.98	-30.41	0.12	35.84	301.97
3200.00	0.91	269.41	3199.61	36.49	19.01	-31.88	0.15	37.12	300.81
3300.00	1.04	273.19	3299.60	38.10	19.06	-33.58	0.14	38.61	299.58
3400.00	1.10	266.69	3399.58	39.85	19.05	-35.44	0.14	40.24	298.26
3500.00	1.14	268.04	3499.56	41.65	18.96	-37.40	0.05	41.93	296.89
3600.00	1.17	265.59	3599.54	43.50	18.85	-39.41	0.06	43.69	295.56
3700.00	1.16	263.26	3699.52	45.33	18.65	-41.43	0.05	45.44	294.24
3800.00	1.06	261.12	3799.50	47.04	18.39	-43.35	0.11	47.09	292.99
3900.00	0.94	267.80	3899.48	48.60	18.22	-45.08	0.17	48.63	292.00
4000.00	0.43	190.91	3999.48	49.30	17.82	-45.98	0.94	49.31	291.18
4100.00	0.40	312.94	4099.48	49.56	17.69	-46.30	0.73	49.57	290.91
4200.00	0.34	329.46	4199.47	50.11	18.18	-46.71	0.12	50.12	291.27
4300.00	0.33	339.66	4299.47	50.53	18.71	-46.96	0.06	50.55	291.72
4400.00	0.10	313.69	4399.47	50.80	19.04	-47.12	0.24	50.82	292.00
4500.00	0.66	266.45	4499.47	51.41	19.06	-47.76	0.60	51.42	291.76
4600.00	0.30	227.26	4599.47	52.05	18.85	-48.53	0.47	52.06	291.23
4700.00	0.60	315.98	4699.46	52.64	19.05	-49.08	0.66	52.65	291.21
4800.00	0.57	300.81	4799.46	53.60	19.68	-49.87	0.16	53.62	291.53



# Scientific Drilling International Survey Report

<b>Company:</b> COG RESOURCES	<b>Date:</b> 12/17/2008	<b>Time:</b> 10:31:03	<b>Page:</b> 2
<b>Field:</b> East Empire Yeso	<b>Co-ordinate(NE) Reference:</b>	<b>Site:</b> Eddy County, NM, Grid North	
<b>Site:</b> Eddy County, NM	<b>Vertical (TVD) Reference:</b>	<b>SITE:</b> 0.0	
<b>Well:</b> Mesquite State #5	<b>Section (VS) Reference:</b>	<b>Well:</b> (0.00N,0.00E,290.28Azi)	
<b>Wellpath:</b> VH - Job #32K1108912	<b>Survey Calculation Method:</b>	Minimum Curvature	<b>Db:</b> Sybase

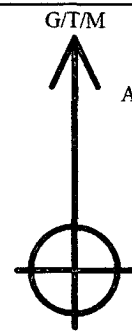
**Survey**

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.67	271.18	4899.45	54.64	19.94	-50.89	0.33	54.66	291.40
5000.00	0.99	292.37	4999.44	56.06	20.28	-52.27	0.44	56.07	291.21
5100.00	0.92	307.93	5099.43	57.69	21.11	-53.70	0.27	57.70	291.46
5200.00	0.78	271.58	5199.42	59.10	21.62	-55.02	0.55	59.11	291.45
5300.00	0.59	258.17	5299.41	60.18	21.53	-56.20	0.25	60.18	290.96
5400.00	0.87	264.37	5399.40	61.30	21.35	-57.46	0.29	61.30	290.39
5413.00	0.78	239.94	5412.40	61.44	21.30	-57.63	2.77	61.44	290.28



**Scientific  
Drilling**

Field: East Empire Yeso  
Site: Eddy County, NM  
Well: Mesquite State #5  
Wellpath: VH - Job #32K1108912  
Survey: 11/14/08



Azimuths to Grid North  
True North: 0.00°  
Magnetic North: 0.00°

Magnetic Field  
Strength: 0nT  
Dip Angle: 0.00°  
Date: 12/17/2008  
Model: igrf2000

