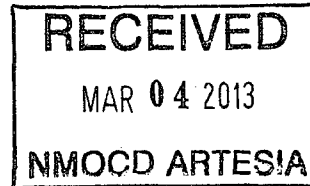




PHOENIX
TECHNOLOGY SERVICES

February 20, 2013

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



Dear District 2 - Artesia

Re: Concho Resources Inc.
Falabella 31 Fee #6H
Eddy Co., NM
API #30-015-40211
Job No. 1310091

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. 664171). 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	
Robert Dillon	6H	2,209	7,357	01/25/13	02/01/13	MWD

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,

Kelly Jo Walter

Kelly Jo Walter
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4364 9377

PHOENIX TECHNOLOGY SERVICES SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 1310091

OPERATOR COG Operating

WELL NAME Falabella 31 Fee #6H

COUNTY & STATE

Eddy County, NM

API WELL NUMBER 30-015-40211

PROPOSED DIRECTION 359.03

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
2,180 ft	2,179.64 ft	0.58	300.56	2.5	-30.12	Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
25-Jan-13	2,209 ft	0.8	327.8

SURVEY INSTRUMENT

TYPE

PHOENIX MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
1-Feb-13	7,357 ft	92.4	0.9

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
1-Feb-13	7,449 ft	92.4	0.9

Robert D. Dillon

PRINT YOUR NAME ABOVE

Robert D. Dillon

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.87
DECLINATION OR GRID	Grid

2/1/2013

TODAY'S DATE

MWD SUPERVISOR 1

Bob Dillon

DIRECTIONAL DRILLER 1

Andrew Hodgkins

MWD SUPERVISOR 2

Eric Burchinal

DIRECTIONAL DRILLER 2

Nathan Hodgkins

1805 Brittmore Road

Houston, Texas 77043

(713)3370609 (Voice), (713)337-0599 (Fax)



COG Operating LLC

Eddy County, New Mexico (NAD 27 NME)

Falabella 31 Fee #6H

Wellbore #1 / Job #1310091

Survey: Phoenix MWD Surveys

Phoenix Final Survey Report

01 February, 2013





Phoenix Technology Services

Phoenix Final Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County, New Mexico (NAD 27, NME)	TVD Reference:	KB @ 3441.00usft (JW.4)
Site:	Falabella 31 Fee	MD Reference:	KB @ 3441.00usft (JW.4)
Well:	#6H	North Reference:	Grid
Wellbore:	Wellbore #1 / Job #1310091	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (JW.4)	Database:	GCR DB

Project	Eddy County, New Mexico (NAD 27, NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Falabella 31 Fee		
Site Position:		Northing:	617,359.30 usft
From:	Map	Easting:	472,777.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 49.8761 N
		Longitude:	104° 25' 18.5752 W
		Grid Convergence:	-0.05 °

Well	#6H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 41' 49.8761 N
		Longitude:	104° 25' 18.5752 W
		Ground Level:	3,428.00 usft

Wellbore	Wellbore #1 / Job #1310091				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	01/25/13	7.81	60.44	48,645

Design	Surveys (JW.4)			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.03



Phoenix Technology Services

Phoenix Final Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County, New Mexico (NAD 27 NME)	TVD Reference:	KB @ 3441.00usft (JW 4)
Site:	Falabella 31 Fee	MD Reference:	KB @ 3441.00usft (JW 4)
Well:	#6H	North Reference:	Grid
Wellbore:	Wellbore #1 / Job #1310091	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (JW 4)	Database:	GCR DB

Survey Program		Date	02/01/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	2,180.00	VES Gyro (Wellbore #1 / Job #1310091)	UNKNOWN	Unknown survey	
2,209.00	7,449.00	Phoenix MWD Surveys (Wellbore #1 / Job	MWD	MWD - Standard	

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,180.00	0.58	300.56	1,261.36	2,179.64	2.50	-30.12	3.00	0.00	617,361.80	472,747.08	
Tie In to Gyro: 2180											
2,209.00	0.80	327.80	1,232.36	2,208.64	2.74	-30.35	3.25	1.34	617,362.04	472,746.85	
First Phoenix MWD Survey											
2,302.00	1.60	354.30	1,139.38	2,301.62	4.58	-30.83	5.10	1.03	617,363.88	472,746.37	
2,333.00	4.80	351.60	1,108.43	2,332.57	6.30	-31.06	6.82	10.33	617,365.60	472,746.14	
2,364.00	8.30	351.30	1,077.64	2,363.36	9.79	-31.59	10.33	11.29	617,369.09	472,745.61	
2,396.00	12.20	351.40	1,046.16	2,394.84	15.42	-32.44	15.97	12.19	617,374.72	472,744.76	
2,427.00	15.50	349.50	1,016.06	2,424.94	22.73	-33.69	23.30	10.74	617,382.03	472,743.51	
2,458.00	18.50	348.10	986.42	2,454.58	31.62	-35.46	32.22	9.77	617,390.92	472,741.74	
2,489.00	21.20	347.20	957.27	2,483.73	41.90	-37.72	42.54	8.77	617,401.20	472,739.48	
2,520.00	24.20	347.90	928.67	2,512.33	53.58	-40.29	54.26	9.72	617,412.88	472,736.91	
2,552.00	27.30	348.30	899.85	2,541.15	67.19	-43.15	67.91	9.70	617,426.49	472,734.05	
2,583.00	30.40	348.50	872.70	2,568.30	81.84	-46.16	82.61	10.00	617,441.14	472,731.04	
2,614.00	33.40	349.10	846.39	2,594.61	97.91	-49.34	98.73	9.73	617,457.21	472,727.86	
2,645.00	36.30	350.60	820.95	2,620.05	115.34	-52.45	116.21	9.75	617,474.64	472,724.75	
2,676.00	39.30	352.20	796.46	2,644.54	134.13	-55.28	135.04	10.18	617,493.43	472,721.92	
2,708.00	42.50	355.00	772.27	2,668.73	154.94	-57.60	155.89	11.52	617,514.24	472,719.60	
2,739.00	45.50	358.00	749.97	2,691.03	176.43	-58.90	177.40	11.78	617,535.73	472,718.30	
2,770.00	48.90	359.20	728.91	2,712.09	199.16	-59.45	200.14	11.33	617,558.46	472,717.75	
2,801.00	51.40	0.40	709.05	2,731.95	222.96	-59.53	223.94	8.59	617,582.26	472,717.67	
2,832.00	54.10	0.80	690.29	2,750.71	247.63	-59.27	248.60	8.77	617,606.93	472,717.93	



Phoenix Technology Services

Phoenix Final Survey Report



Company: COG Operating LLC
Project: Eddy County, New Mexico (NAD 27-NME)
Site: Palabella 31' Fee
Well: #6H
Wellbore: Wellbore #1 / Job #1310091
Design: Surveys (JW 4)

Local Co-ordinate Reference: Well #6H
TVD Reference: KB @ 3441.00usft (JW 4)
MD Reference: KB @ 3441.00usft (JW 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: GCR DB

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,863.00	57.00	0.80	672.75	2,768.25	273.19	-58.91	274.15	9.35	617,632.49	472,718.29	
2,895.00	60.40	0.60	656.13	2,784.87	300.53	-58.58	301.48	10.64	617,659.83	472,718.62	
2,926.00	63.50	0.10	641.55	2,799.45	327.88	-58.41	328.82	10.10	617,687.18	472,718.79	
2,957.00	66.10	358.80	628.36	2,812.64	355.93	-58.68	356.87	9.21	617,715.23	472,718.52	
2,988.00	69.40	357.80	616.62	2,824.38	384.60	-59.54	385.55	11.06	617,743.90	472,717.66	
3,020.00	73.10	357.10	606.33	2,834.67	414.87	-60.89	415.84	11.75	617,774.17	472,716.31	
3,051.00	76.50	357.10	598.21	2,842.79	444.74	-62.40	445.73	10.97	617,804.04	472,714.80	
3,082.00	79.40	358.00	591.74	2,849.26	475.03	-63.70	476.04	9.78	617,834.33	472,713.50	
3,113.00	82.00	359.20	586.73	2,854.27	505.61	-64.44	506.63	9.22	617,864.91	472,712.76	
3,144.00	84.90	0.10	583.19	2,857.81	536.40	-64.63	537.42	9.79	617,895.70	472,712.57	
3,175.00	87.70	0.80	581.19	2,859.81	567.33	-64.39	568.34	9.31	617,926.63	472,712.81	
3,207.00	90.10	1.00	580.58	2,860.42	599.32	-63.88	600.31	7.53	617,958.62	472,713.32	
3,238.00	91.00	1.10	580.87	2,860.13	630.31	-63.32	631.29	2.92	617,989.61	472,713.88	
3,331.00	91.40	358.70	582.82	2,858.18	723.28	-63.48	724.26	2.62	618,082.58	472,713.72	
3,425.00	91.30	358.80	585.04	2,855.96	817.24	-65.53	818.23	0.15	618,176.54	472,711.67	
3,519.00	91.40	359.00	587.25	2,853.75	911.19	-67.33	912.20	0.24	618,270.49	472,709.87	
3,613.00	93.00	359.30	590.86	2,850.14	1,005.11	-68.73	1,006.13	1.73	618,364.41	472,708.47	
3,706.00	93.00	0.00	595.73	2,845.27	1,097.98	-69.29	1,099.00	0.75	618,457.28	472,707.91	
3,800.00	92.90	359.70	600.56	2,840.44	1,191.86	-69.54	1,192.86	0.34	618,551.16	472,707.66	
3,893.00	91.50	358.90	604.13	2,836.87	1,284.78	-70.67	1,285.79	1.73	618,644.08	472,706.53	
3,986.00	92.90	358.80	607.70	2,833.30	1,377.69	-72.54	1,378.72	1.51	618,736.99	472,704.66	
4,080.00	94.50	357.90	613.77	2,827.23	1,471.45	-75.24	1,472.51	1.95	618,830.75	472,701.96	
4,173.00	94.60	358.50	621.15	2,819.85	1,564.11	-78.15	1,565.21	0.65	618,923.41	472,699.05	
4,267.00	94.60	359.00	628.69	2,812.31	1,657.78	-80.20	1,658.90	0.53	619,017.08	472,697.00	
4,361.00	94.40	359.20	636.06	2,804.94	1,751.48	-81.67	1,752.61	0.30	619,110.78	472,695.53	
4,454.00	95.20	358.40	643.84	2,797.16	1,844.13	-83.61	1,845.29	1.21	619,203.43	472,693.59	
4,548.00	95.00	358.40	652.20	2,788.80	1,937.73	-86.22	1,938.91	0.21	619,297.03	472,690.98	



Phoenix Technology Services

Phoenix Final Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County - New Mexico (NAD:27 NME)	TVD Reference:	KB @ 3441.00usft (JW 4)
Site:	Falabella 31 Fee	MD Reference:	KB @ 3441.00usft (JW 4)
Well:	#6H	North Reference:	Grid
Wellbore:	Wellbore #1 / Job #1310091	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (JW 4)	Database:	GCR DB

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
4,641.00	94.90	358.40	660.22	2,780.78	2,030.34	-88.81	2,031.55	0.11	619,389.64	472,688.39
4,735.00	95.00	358.80	668.34	2,772.66	2,123.96	-91.10	2,125.20	0.44	619,483.26	472,686.10
4,828.00	94.10	0.40	675.71	2,765.29	2,216.66	-91.74	2,217.90	1.97	619,575.96	472,685.46
4,922.00	92.40	1.30	681.04	2,759.96	2,310.50	-90.35	2,311.70	2.05	619,669.80	472,686.85
5,016.00	92.30	1.80	684.90	2,756.10	2,404.38	-87.81	2,405.53	0.54	619,763.68	472,689.39
5,109.00	92.30	0.80	688.63	2,752.37	2,497.28	-85.70	2,498.38	1.07	619,856.58	472,691.50
5,203.00	92.70	359.30	692.73	2,748.27	2,591.19	-85.62	2,592.27	1.65	619,950.49	472,691.58
5,297.00	94.30	358.20	698.47	2,742.53	2,684.99	-87.67	2,686.09	2.06	620,044.29	472,689.53
5,390.00	94.70	357.90	705.77	2,735.23	2,777.65	-90.82	2,778.79	0.54	620,136.95	472,686.38
5,484.00	93.80	359.00	712.73	2,728.27	2,871.35	-93.36	2,872.52	1.51	620,230.65	472,683.84
5,578.00	93.40	0.60	718.63	2,722.37	2,965.16	-93.68	2,966.33	1.75	620,324.46	472,683.52
5,672.00	93.40	1.10	724.21	2,716.79	3,058.99	-92.29	3,060.11	0.53	620,418.29	472,684.91
5,765.00	93.40	1.50	729.72	2,711.28	3,151.80	-90.18	3,152.88	0.43	620,511.10	472,687.02
5,859.00	92.70	0.70	734.73	2,706.27	3,245.65	-88.38	3,246.68	1.13	620,604.95	472,688.82
5,953.00	92.50	358.80	738.99	2,702.01	3,339.55	-88.79	3,340.57	2.03	620,698.85	472,688.41
6,046.00	92.10	359.10	742.72	2,698.28	3,432.46	-90.50	3,433.50	0.54	620,791.76	472,686.70
6,140.00	91.70	359.40	745.84	2,695.16	3,526.40	-91.73	3,527.44	0.53	620,885.70	472,685.47
6,234.00	91.90	358.70	748.79	2,692.21	3,620.34	-93.28	3,621.40	0.77	620,979.64	472,683.92
6,327.00	93.30	358.40	753.01	2,687.99	3,713.21	-95.63	3,714.30	1.54	621,072.51	472,681.57
6,421.00	93.10	359.00	758.26	2,682.74	3,807.04	-97.76	3,808.15	0.67	621,166.34	472,679.44
6,515.00	92.50	358.50	762.85	2,678.15	3,900.90	-99.81	3,902.03	0.83	621,260.20	472,677.39
6,609.00	92.30	358.90	766.79	2,674.21	3,994.80	-101.94	3,995.95	0.48	621,354.10	472,675.26
6,702.00	92.00	359.00	770.28	2,670.72	4,087.71	-103.64	4,088.88	0.34	621,447.01	472,673.56
6,796.00	92.60	0.00	774.05	2,666.95	4,181.63	-104.46	4,182.80	1.24	621,540.93	472,672.74
6,889.00	93.20	0.10	778.75	2,662.25	4,274.51	-104.38	4,275.67	0.65	621,633.81	472,672.82
6,983.00	93.10	0.00	783.92	2,657.08	4,368.37	-104.30	4,369.51	0.15	621,727.67	472,672.90
7,076.00	93.30	0.20	789.11	2,651.89	4,461.23	-104.14	4,462.35	0.30	621,820.53	472,673.06



Phoenix Technology Services

Phoenix Final Survey Report



Company: COG Operating LLC
Project: Eddy County, New Mexico (NAD 27 NME)
Site: Falabella 31 Fee
Well: #6H
Wellbore: Wellbore #1 / Job #1310091
Design: Surveys (JW 4)

Local Co-ordinate Reference: Well #6H
TVD Reference: KB @ 3441'00usft (JW 4)
MD Reference: KB @ 3441'00usft (JW 4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
7,169.00	93.40	0.70	794.54	2,646.46	4,554.06	-103.41	4,555.16	0.55	621,913.36	472,673.79
7,263.00	92.80	0.80	799.63	2,641.37	4,647.92	-102.18	4,648.98	0.65	622,007.22	472,675.02
7,357.00	92.40	0.90	803.89	2,637.11	4,741.81	-100.79	4,742.84	0.44	622,101.11	472,676.41
Current MWD Survey										
7,449.00	92.40	0.90	807.74	2,633.26	4,833.72	-99.34	4,834.71	0.00	622,193.02	472,677.86
Projection to Bit										

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,180.00	2,179.64	2.50	-30.12	Tie In to Gyro, 2180'
2,209.00	2,208.64	2.74	-30.35	First Phoenix MWD Survey
7,357.00	2,637.11	4,741.81	-100.79	Current MWD Survey
7,449.00	2,633.26	4,833.72	-99.34	Projection to Bit

Checked By: _____

Approved By: _____

Date: _____

