



July 25, 2014

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

15-42420

Attn: Kanicia Castillo

RE: Puckett 13 Federal Com 35H

Please find enclosed a copy of the survey from 0.00' to 4526.00' ran on the above referenced well.

Sincerely,

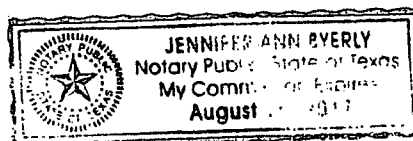
Keith Havelka
Operations

STATE OF TEXAS §

COUNTY OF NUECES §

This instrument was acknowledged before me on the 25 day of July, A.D., 2014, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: Concho
Lease/Well: Puckett 13 Federal Com/35H

Rig Name: United 43
State/County: New Mexico/Eddy
Latitude: 32.83, Longitude: -103.82
GRID North is 0.28 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : R.K.B. = 14.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 7/25/2014 / 14:39

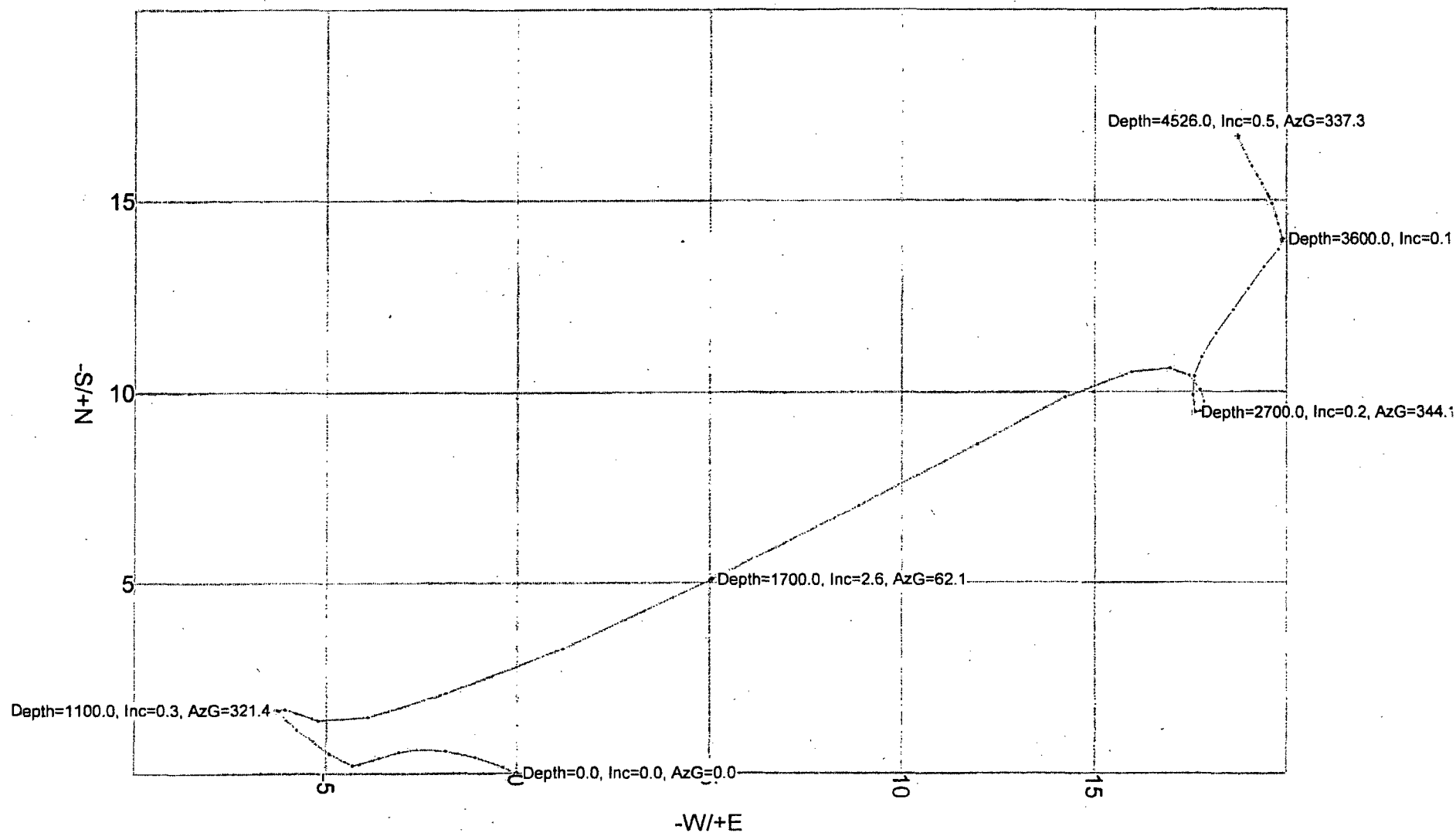
VES Survey International
West Texas
(432) 563-5444
Surveyor: Evan Goetz
Puckett 13 Federal Com 35H / API 30-015-42420

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	0.45	294.10	100.00	0.16	-0.36	0.16	0.40	294.10	0.45
200.00	0.44	284.96	200.00	0.42	-1.09	0.42	1.17	291.12	0.07
300.00	0.46	279.39	299.99	0.59	-1.86	0.59	1.95	287.51	0.05
400.00	0.41	265.08	399.99	0.62	-2.62	0.62	2.69	283.38	0.12
500.00	0.13	255.20	499.99	0.56	-3.08	0.56	3.13	280.35	0.29
600.00	0.51	252.44	599.99	0.40	-3.61	0.40	3.63	276.33	0.38
700.00	0.10	250.23	699.99	0.24	-4.12	0.24	4.13	273.29	0.40
800.00	0.12	268.28	799.99	0.20	-4.30	0.20	4.31	272.70	0.04
900.00	0.69	302.66	899.98	0.53	-4.92	0.53	4.94	276.12	0.60
1000.00	0.53	310.94	999.98	1.15	-5.77	1.15	5.89	281.31	0.19
1100.00	0.31	321.38	1099.97	1.67	-6.29	1.67	6.51	284.86	0.22
1200.00	0.49	115.76	1199.97	1.70	-6.08	1.70	6.31	285.61	0.78
1300.00	0.56	103.20	1299.97	1.40	-5.23	1.40	5.41	285.04	0.13
1400.00	0.99	77.07	1399.96	1.49	-3.91	1.49	4.18	290.80	0.55
1500.00	1.46	70.79	1499.94	2.10	-1.87	2.10	2.81	318.32	0.49
1600.00	2.30	67.90	1599.88	3.27	1.19	3.27	3.48	20.03	0.84
1700.00	2.58	62.07	1699.79	5.08	5.04	5.08	7.15	44.77	0.38
1800.00	2.35	64.26	1799.70	7.03	8.88	7.03	11.32	51.64	0.25

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
1900.00	1.61	59.70	1899.64	8.63	11.94	8.63	14.73	54.15	0.76
2000.00	1.37	64.20	1999.60	9.86	14.23	9.86	17.31	55.29	0.27
2100.00	0.79	78.15	2099.59	10.52	15.98	10.52	19.13	56.65	0.63
2200.00	0.36	99.34	2199.58	10.61	16.96	10.61	20.01	57.98	0.48
2300.00	0.26	126.33	2299.58	10.42	17.46	10.42	20.33	59.16	0.17
2400.00	0.29	156.54	2399.58	10.05	17.74	10.05	20.39	60.46	0.15
2500.00	0.10	179.05	2499.58	9.74	17.84	9.74	20.33	61.37	0.20
2600.00	0.22	210.08	2599.58	9.49	17.75	9.49	20.12	61.88	0.15
2700.00	0.17	344.14	2699.58	9.46	17.61	9.46	19.99	61.76	0.36
2800.00	0.36	358.68	2799.58	9.92	17.56	9.92	20.17	60.55	0.21
2900.00	0.21	14.51	2899.58	10.41	17.60	10.41	20.45	59.40	0.17
3000.00	0.40	24.16	2999.57	10.90	17.79	10.90	20.86	58.50	0.19
3100.00	0.44	37.59	3099.57	11.52	18.16	11.52	21.51	57.61	0.11
3200.00	0.42	34.72	3199.57	12.13	18.61	12.13	22.21	56.90	0.03
3300.00	0.36	33.30	3299.57	12.70	18.99	12.70	22.85	56.24	0.06
3400.00	0.42	39.30	3399.56	13.25	19.40	13.25	23.49	55.67	0.07
3500.00	0.25	38.60	3499.56	13.71	19.77	13.71	24.06	55.27	0.17
3600.00	0.11	349.11	3599.56	13.97	19.89	13.97	24.31	54.92	0.20
3700.00	0.15	338.02	3699.56	14.19	19.83	14.19	24.38	54.41	0.05
3800.00	0.08	358.30	3799.56	14.38	19.77	14.38	24.45	53.98	0.08
3900.00	0.17	339.60	3899.56	14.59	19.72	14.59	24.53	53.50	0.10
4000.00	0.20	341.83	3999.56	14.90	19.61	14.90	24.63	52.77	0.03
4100.00	0.04	320.21	4099.56	15.10	19.53	15.10	24.69	52.30	0.17
4200.00	0.05	334.92	4199.56	15.16	19.50	15.16	24.70	52.14	0.01
4300.00	0.30	331.39	4299.56	15.42	19.36	15.42	24.75	51.45	0.25
4400.00	0.31	328.74	4399.56	15.88	19.09	15.88	24.83	50.24	0.02
4526.00	0.49	337.28	4525.55	16.67	18.71	16.67	25.06	48.29	0.15



VES Survey International
West Texas
(432) 563-5444
Surveyor: Evan Goetz
Puckett 13 Federal Com 35H / API 30-015-42420



VES Survey Date: 07/18/2014



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Puckett 13 Federal Com Well No. 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Site:	Puckett 13 Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13 Federal Com Well No. 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	EDM 5000.1 Database

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

Site:	Puckett 13 Federal Com				
Site Position:		Northings:	669,864.10 usft	Latitude:	32.84047105
From:	Map	Easting:	659,000.60 usft	Longitude:	-103.81564459
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.28 °

Puckett 13 Federal Com Well No. 35H						
Well Position	+N-S	0.00 usft	Northings:	665,214.30 usft	Latitude:	32.82771407
	+E-W	0.00 usft	Easting:	657,243.60 usft	Longitude:	-103.82143833
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,914.00 usft

Wellbore:	Original Hole				
Magnetics:	Model Name:	Sample Date:	Declination:	Dip Angle:	Field Strength:
			(°)	(°)	(nT)
	IGRF2010	3/7/2014	7.41	60.63	48,675

Design:	Surveys Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	0.04	



Standard_report

N=30NE

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Puckett 13.Federal Com Well No. 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5' @ 3927.50usft (United #43)
Site:	Puckett 13.Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13.Federal Com Well No. 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys' Original Hole	Database:	EDM 5000.1 Database

Survey Program		Date: 7/26/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	4,526.00	Gyro (Original Hole)	NS-GYRO-MS	North sensing gyrocompassing m/s	
4,609.00	9,943.00	MWD (Original Hole)	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	D Log (°/100ft)	V/Sec (usft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	665,214.30	657,243.60
100.00	0.45	294.10	100.00	0.16	-0.36	0.45	0.16	665,214.46	657,243.24
Gyro									
200.00	0.44	284.96	200.00	0.42	-1.09	0.07	0.42	665,214.72	657,242.51
300.00	0.46	279.39	299.99	0.58	-1.85	0.05	0.58	665,214.88	657,241.75
400.00	0.41	285.08	399.99	0.62	-2.61	0.12	0.62	665,214.92	657,240.99
500.00	0.13	255.20	499.99	0.56	-3.07	0.28	0.56	665,214.86	657,240.53
600.00	0.51	252.44	599.99	0.40	-3.61	0.38	0.39	665,214.70	657,239.99
700.00	0.10	250.23	699.99	0.23	-4.11	0.41	0.23	665,214.53	657,239.49
800.00	0.12	268.28	799.99	0.20	-4.30	0.04	0.20	665,214.50	657,239.30
900.00	0.69	302.66	899.98	0.52	-4.91	0.59	0.52	665,214.82	657,238.69
1,000.00	0.53	310.94	999.98	1.15	-5.77	0.18	1.15	665,215.45	657,237.83
1,100.00	0.31	321.38	1,099.97	1.66	-6.29	0.23	1.66	665,215.96	657,237.31
1,200.00	0.49	115.76	1,199.97	1.69	-6.07	0.78	1.69	665,215.99	657,237.53
1,300.00	0.56	103.20	1,299.97	1.39	-5.21	0.13	1.39	665,215.69	657,238.39
1,400.00	0.99	77.07	1,399.96	1.47	-3.89	0.55	1.47	665,215.77	657,239.71
1,500.00	1.46	70.79	1,499.94	2.09	-1.85	0.49	2.09	665,216.39	657,241.75
1,600.00	2.30	67.90	1,599.88	3.26	1.22	0.85	3.26	665,217.56	657,244.82
1,700.00	2.58	62.07	1,699.79	5.07	5.06	0.37	5.07	665,219.37	657,248.66
1,800.00	2.35	64.26	1,799.70	7.01	8.90	0.25	7.02	665,221.31	657,252.50
1,900.00	1.61	59.70	1,899.64	8.61	11.96	0.76	8.62	665,222.91	657,255.56



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Puckett 13 Federal Com Well No. 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Site:	Puckett 13 Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13 Federal Com Well No. 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	EDM 5000.1 Database

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	D Leg (°/100ft)	V: Sec (usft)	Northing (usft)	Easting (usft)
	2,000.00	1.37	64.20	1,999.60	9.84	14.25	0.27	9.85	665,224.14	657,257.85
	2,100.00	0.79	78.15	2,099.59	10.50	16.00	0.63	10.52	665,224.80	657,259.60
	2,200.00	0.36	99.34	2,199.58	10.59	16.98	0.47	10.61	665,224.89	657,260.58
	2,300.00	0.26	126.33	2,299.58	10.41	17.48	0.17	10.42	665,224.71	657,261.08
	2,400.00	0.29	156.54	2,399.58	10.04	17.76	0.15	10.06	665,224.34	657,261.36
	2,500.00	0.10	179.05	2,499.58	9.72	17.86	0.20	9.74	665,224.02	657,261.46
	2,600.00	0.22	210.08	2,599.58	9.47	17.77	0.14	9.48	665,223.77	657,261.37
	2,700.00	0.17	344.14	2,699.58	9.45	17.63	0.36	9.46	665,223.75	657,261.23
	2,800.00	0.36	358.68	2,799.58	9.90	17.58	0.20	9.92	665,224.20	657,261.18
	2,900.00	0.21	14.51	2,899.58	10.39	17.62	0.17	10.41	665,224.69	657,261.22
	3,000.00	0.40	24.16	2,999.57	10.89	17.81	0.20	10.90	665,225.19	657,261.41
	3,100.00	0.44	37.59	3,099.57	11.51	18.19	0.11	11.53	665,225.81	657,261.79
	3,200.00	0.42	34.72	3,199.57	12.12	18.63	0.03	12.13	665,226.42	657,262.23
	3,300.00	0.36	33.30	3,299.57	12.68	19.01	0.06	12.70	665,226.98	657,262.61
	3,400.00	0.42	39.30	3,399.56	13.23	19.42	0.07	13.24	665,227.53	657,263.02
	3,500.00	0.25	38.60	3,499.56	13.68	19.78	0.17	13.70	665,227.98	657,263.38
	3,600.00	0.11	349.11	3,599.56	13.95	19.90	0.20	13.96	665,228.25	657,263.50
	3,700.00	0.15	338.02	3,699.56	14.16	19.83	0.05	14.18	665,228.46	657,263.43
	3,800.00	0.08	358.30	3,799.56	14.35	19.78	0.08	14.37	665,228.65	657,263.38
	3,900.00	0.17	339.60	3,899.56	14.56	19.73	0.10	14.58	665,228.86	657,263.33
	4,000.00	0.20	341.83	3,999.56	14.87	19.62	0.03	14.88	665,229.17	657,263.22
	4,100.00	0.04	320.21	4,099.56	15.06	19.55	0.16	15.07	665,229.36	657,263.15
	4,200.00	0.05	334.92	4,199.56	15.13	19.51	0.02	15.14	665,229.43	657,263.11
	4,300.00	0.30	331.39	4,299.56	15.40	19.36	0.25	15.41	665,229.70	657,262.96
	4,400.00	0.31	328.74	4,399.56	15.86	19.10	0.02	15.87	665,230.16	657,262.70
	4,526.00	0.49	337.28	4,525.55	16.65	18.71	0.15	16.66	665,230.95	657,262.31



Standard_report



Company:	COG Operating, LLC					Local Co-ordinate Reference:		Well: Puckett, 13 Federal Com Well No. 35H		
Project:	Eddy County, New Mexico					TVD Reference:		RKB=3914+13.5 @ 3927.50usft (United #43)		
Site:	Puckett, 13 Federal Com					MD Reference:		RKB=3914+13.5 @ 3927.50usft (United #43)		
Well:	Puckett, 13 Federal Com Well No. 35H					North Reference:		Grid		
Wellbore:	Original Hole					Survey Calculation Method:		Minimum Curvature		
Design:	Surveys Original Hole					Database:		EDM 5000.1 Database		
Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	D Leg (ft/100ft)	V: Sec (usft)	Northing (usft)	Easting (usft)	
4,609.00	0.00	317.20	4,608.55	16.97	18.57	0.59	16.99	665,231.27	657,262.17	
MWD Surveys										
4,704.00	0.20	10.60	4,703.55	17.14	18.60	0.21	17.15	665,231.44	657,262.20	
4,799.00	0.20	333.40	4,798.55	17.45	18.56	0.13	17.46	665,231.75	657,262.16	
4,862.00	0.20	335.50	4,861.55	17.65	18.47	0.01	17.66	665,231.95	657,262.07	
4,893.00	1.60	359.70	4,892.55	18.13	18.44	4.58	18.14	665,232.43	657,262.04	
4,925.00	4.60	0.50	4,924.50	19.86	18.45	9.38	19.87	665,234.16	657,262.05	
4,956.00	7.90	3.30	4,955.31	23.23	18.58	10.69	23.24	665,237.53	657,262.18	
4,988.00	11.80	5.70	4,986.83	28.68	19.04	12.25	28.70	665,242.98	657,262.64	
5,019.00	14.40	7.80	5,017.02	35.66	19.87	8.53	35.67	665,249.96	657,263.47	
5,050.00	16.90	8.50	5,046.87	43.93	21.06	8.09	43.95	665,258.23	657,264.66	
5,082.00	19.40	7.80	5,077.28	53.80	22.47	7.84	53.82	665,268.10	657,266.07	
5,113.00	21.80	7.50	5,108.29	64.61	23.92	7.75	64.63	665,278.91	657,267.52	
5,145.00	23.80	8.50	5,135.79	76.89	25.65	6.37	76.91	665,291.19	657,269.25	
5,176.00	25.70	9.20	5,163.94	89.71	27.65	6.20	89.73	665,304.01	657,271.25	
5,208.00	27.10	9.90	5,192.60	103.74	30.01	4.48	103.76	665,318.04	657,273.61	
5,239.00	27.40	11.00	5,220.16	117.70	32.59	1.89	117.72	665,332.00	657,276.19	
5,271.00	29.00	12.40	5,248.36	132.50	35.66	5.41	132.53	665,346.80	657,279.26	
5,303.00	31.50	13.50	5,276.01	148.21	39.28	8.00	148.24	665,362.51	657,282.88	
5,334.00	34.50	13.50	5,302.00	164.63	43.22	9.68	164.66	665,378.93	657,286.82	
5,362.00	37.39	13.14	5,324.67	180.62	47.00	10.35	180.65	665,394.92	657,290.60	
330 Hard line Intercept @ 5362 MD										
5,365.00	37.70	13.10	5,327.05	182.40	47.42	10.35	182.43	665,396.70	657,291.02	
5,397.00	41.30	12.80	5,351.73	202.23	51.98	11.27	202.27	665,416.53	657,295.58	
5,428.00	45.00	12.80	5,374.35	222.91	56.67	11.94	222.95	665,437.21	657,300.27	
5,460.00	48.70	13.50	5,396.23	245.63	61.99	11.67	245.68	665,459.93	657,305.59	
5,491.00	51.20	13.50	5,416.17	268.71	67.53	8.06	268.75	665,483.01	657,311.13	



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Puckett 13 Federal Com Well No 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Site:	Puckett 13 Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13 Federal Com Well No 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	EDM 5000.1 Database

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLog (ft/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
5,523.00	54.50	13.10	5,435.50	293.53	73.39	10.36	293.58	665,507.83	657,316.99
5,554.00	58.10	12.80	5,452.69	318.66	79.17	11.64	318.71	665,532.96	657,322.77
5,585.00	60.90	13.10	5,468.42	344.68	85.16	9.07	344.74	665,558.98	657,328.76
5,617.00	62.80	12.80	5,483.52	372.18	91.48	5.99	372.24	665,586.48	657,335.08
5,648.00	67.00	13.10	5,496.67	399.53	97.77	13.58	399.60	665,613.83	657,341.37
5,680.00	72.70	13.10	5,507.69	428.78	104.57	17.81	428.85	665,643.08	657,348.17
5,711.00	78.10	13.50	5,515.50	457.96	111.47	17.46	458.04	665,672.26	657,355.07
5,743.00	83.60	14.90	5,520.59	488.58	119.22	17.72	488.66	665,702.88	657,362.82
5,834.00	90.10	14.20	5,525.58	576.48	142.04	7.18	576.58	665,790.78	657,385.64
5,866.00	90.40	11.30	5,525.44	607.69	149.10	9.11	607.79	665,821.99	657,392.70
5,961.00	92.40	7.10	5,523.12	701.41	164.28	4.90	701.52	665,915.71	657,407.88
6,055.00	91.80	4.00	5,519.68	794.89	173.36	3.36	795.02	666,009.19	657,416.96
6,150.00	90.80	357.60	5,517.52	889.81	174.69	6.82	889.93	666,104.11	657,418.29
6,244.00	91.50	357.30	5,515.63	983.70	170.51	0.81	983.82	666,198.00	657,414.11
6,339.00	92.00	356.90	5,512.73	1,078.53	165.70	0.67	1,078.65	666,292.83	657,409.30
6,434.00	91.70	356.60	5,509.66	1,173.33	160.32	0.45	1,173.44	666,387.63	657,403.92
6,528.00	91.50	356.90	5,507.04	1,267.14	154.99	0.38	1,267.25	666,481.44	657,398.59
6,623.00	91.70	357.30	5,504.39	1,361.98	150.19	0.47	1,362.09	666,576.28	657,393.79
6,718.00	91.70	356.90	5,501.57	1,456.82	145.38	0.42	1,456.92	666,671.12	657,388.98
6,812.00	91.50	356.90	5,498.94	1,550.64	140.30	0.21	1,550.74	666,764.94	657,383.90
6,907.00	91.00	356.60	5,496.87	1,645.47	134.92	0.61	1,645.56	666,859.77	657,378.52
7,001.00	91.70	356.90	5,494.66	1,739.29	129.59	0.81	1,739.38	666,953.59	657,373.19
7,096.00	91.50	356.60	5,492.00	1,834.10	124.21	0.38	1,834.19	667,048.40	657,367.81
7,191.00	91.10	356.60	5,489.85	1,928.91	118.57	0.42	1,928.99	667,143.21	657,362.17
7,285.00	90.80	356.60	5,488.29	2,022.73	113.00	0.32	2,022.81	667,237.03	657,356.60
7,380.00	91.70	356.90	5,486.22	2,117.55	107.62	1.00	2,117.63	667,331.85	657,351.22
7,474.00	91.70	356.90	5,483.43	2,211.38	102.53	0.00	2,211.45	667,425.68	657,346.13



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N-ONE

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well: Puckett 13 Federal Com Well No. 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Site:	Puckett 13 Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13 Federal Com Well No. 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	EDM 5000.1 Database

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
7.569.00	92.20	357.30	5,480.20	2,306.20	97.73	0.67	2,306.27	667,520.50	657,341.33
7.663.00	92.90	357.30	5,476.01	2,400.00	93.31	0.74	2,400.06	667,614.30	657,336.91
7.758.00	92.70	357.30	5,471.37	2,494.78	88.84	0.21	2,494.84	667,709.08	657,332.44
7.852.00	92.70	357.30	5,466.95	2,588.57	84.41	0.00	2,588.63	667,802.87	657,328.01
7.948.00	93.10	357.30	5,462.09	2,684.34	79.90	0.42	2,684.40	667,898.64	657,323.50
8.042.00	91.70	356.60	5,458.15	2,778.12	74.90	1.66	2,778.18	667,992.42	657,318.50
8.137.00	92.00	357.60	5,455.09	2,872.95	70.10	1.10	2,873.00	668,087.25	657,313.70
8.231.00	92.00	357.30	5,451.81	2,966.80	65.92	0.32	2,966.85	668,181.10	657,309.52
8.326.00	92.20	357.30	5,448.32	3,061.63	61.44	0.21	3,061.67	668,275.93	657,305.04
8.420.00	90.10	358.70	5,446.44	3,155.55	58.17	2.68	3,155.59	668,369.85	657,301.77
8.515.00	89.60	359.00	5,446.69	3,250.53	56.26	0.61	3,250.57	668,464.83	657,299.86
8.610.00	90.60	358.00	5,446.52	3,345.49	53.77	1.49	3,345.53	668,559.79	657,297.37
8.705.00	90.30	358.30	5,445.77	3,440.44	50.71	0.45	3,440.48	668,654.74	657,294.31
8.799.00	90.10	359.00	5,445.45	3,534.41	48.49	0.77	3,534.45	668,748.71	657,292.09
8.893.00	90.60	358.70	5,444.87	3,628.39	46.60	0.62	3,628.42	668,842.69	657,290.20
8.988.00	91.00	358.30	5,443.55	3,723.35	44.12	0.60	3,723.38	668,937.65	657,287.72
9.083.00	91.00	359.00	5,441.89	3,818.31	41.88	0.74	3,818.34	669,032.61	657,285.48
9.178.00	91.30	359.00	5,439.98	3,913.28	40.22	0.32	3,913.30	669,127.58	657,283.82
9.272.00	91.50	359.40	5,437.68	4,007.24	38.91	0.48	4,007.26	669,221.54	657,282.51
9.367.00	91.80	359.40	5,434.95	4,102.19	37.92	0.32	4,102.22	669,316.49	657,281.52
9.462.00	92.00	358.70	5,431.80	4,197.13	36.34	0.77	4,197.15	669,411.43	657,279.94
9.556.00	90.30	358.70	5,429.91	4,291.08	34.21	1.81	4,291.10	669,505.38	657,277.81
9.651.00	90.10	358.70	5,429.58	4,386.06	32.05	0.21	4,386.08	669,600.36	657,275.65
9.746.00	90.10	358.70	5,429.42	4,481.03	29.90	0.00	4,481.05	669,695.33	657,273.50
9.841.00	90.10	358.70	5,429.25	4,576.01	27.74	0.00	4,576.02	669,790.31	657,271.34
9.935.00	89.60	359.00	5,429.50	4,669.99	25.86	0.62	4,670.00	669,884.29	657,269.46



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Puckett 13, Federal Com Well No. 35H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Site:	Puckett 13 Federal Com	MD Reference:	RKB=3914+13.5 @ 3927.50usft (United #43)
Well:	Puckett 13 Federal Com Well No. 35H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	EDM 5000.1 Database

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLog (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
9,943.00	89.60	359.00	5,429.55	4,677.99	25.72	0.00	4,678.00	669,892.29	657,269.32
Survey projected to 9943.00 MD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		N/S (usft)	E/W (usft)	
100.00	100.00	0.16	-0.36	Gyro
4,609.00	4,608.55	16.97	18.57	MWD surveys
5,362.00	5,324.67	180.62	47.00	330 Hard line intercept @ 5362 MD
9,943.00	5,429.55	4,677.99	25.72	Survey projected to 9943.00 MD