

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNOV - 1 2008
OCD-ARTESIAFORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other			5 Lease Serial No. NMNM0467931		
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resvr. Other _____			6 If Indian, Allottee or Tribe Name		
2. Name of Operator COG OPERATING LLC			Contact: KANICIA CARRILLO E-Mail: kcarrillo@conchoresources.com		
3. Address 550 WEST TEXAS AVE STE 1300 MIDLAND, TX 79701			3a. Phone No. (include area code) Ph: 432-685-4332		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface Lot E 2510FNL 250FWL 32.84927 N Lat, 103 96704 W Lon At top prod interval reported below Lot E 2510FNL 250FWL 32 84927 N Lat, 103 96704 W Lon At total depth Lot E 2186FNL 373FWL			8 Lease Name and Well No. ELECTRA FEDERAL 23		
14. Date Spudded 08/19/2008			15. Date T.D. Reached 09/01/2008		
16. Date Completed ☐ D & A ☒ Ready to Prod 09/22/2008			9 API Well No. 30-015-35979		
18. Total Depth: MD 5972 TVD 5957			19. Plug Back T.D.: MD 5911 TVD		
20. Depth Bridge Plug Set. MD TVD			10 Field and Pool, or Exploratory LOCO HILLS, GLORIETA YESO		
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) COMPENSATED NEUTRON CCL			11. Sec., T., R., M., or Block and Survey or Area Sec 10 T17S R30E Mer		
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☒ No ☐ Yes (Submit analysis)			12 County or Parish EDDY		
			13 State NM		
			17 Elevations (DF, KB, RT, GL)* 3697 GL		

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17 500	13 375 H40	48 0		409		955		0	17
11 000	8 625 J55	32.0		1314		600		0	223
7 875	5 500 J55	17 0		5972		1100		0	100

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	4918							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
A) YESO	5020	5220	5020 TO 5220	0 410	36	OPEN
B) YESO	5330	5530	5330 TO 5530	0 410	36	OPEN
C) YESO	5600	5800	5600 TO 5800	0 410	48	OPEN
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, Etc

Depth Interval	Amount and Type of Material
5020 TO 5220	ACIDIZE W/2,500 GALS ACID FRAC W/134,522 GALS GEL, 169,618# 16/30 SAND, 24,916# SIBERPROP SAND
5330 TO 5530	ACIDIZE W/3,500 GALS ACID FRAC W/127,386 GALS GEL, 151,483# 16/30 SAND, 30,999# SIBERPROP SAND
5600 TO 5800	ACIDIZE W/3,500 GALS ACID FRAC W/119,344 GALS GEL, 148,766# 16/30 SAND, 34,113# SIBERPROP SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
09/28/2008	10/05/2008	24	→	103 0	116 0	450 0	38 9		ELECTRIC PUMPING UNIT
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→					POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #64284 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

28b. Production - Interval C									
Date First Produced	Test Date	Hours Tested	Test Production 	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Tbg. Press Flwg SI	Csg Press	24 Hr Rate 	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

Date First Produced	Test Date	Hours Tested	Test Production 	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate 	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc)

30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries	31. Formation (Log) Markers
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30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries	31. Formation (Log) Markers
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[illegible]

32 Additional remarks (include plugging procedure):
Logs will be mailed.

33. Circle enclosed attachments.

1. Electrical/Mechanical Logs (1 full set req'd)	2. Geologic Report	3. DST Report	4. Directional Survey
5. Sundry Notice for plugging and cement verification	6. Core Analysis	7. Other:	

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)

Electronic Submission #64284 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Carlsbad

Name (please print) KANICIA CARRILLO Title PREPARER

Name (please print) KANICIA CARRILLO Title PREPARER

Signature _____ (Electronic Submission) Date 10/30/2008

Signature _____ (Electronic Submission) Date 10/30/2008

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

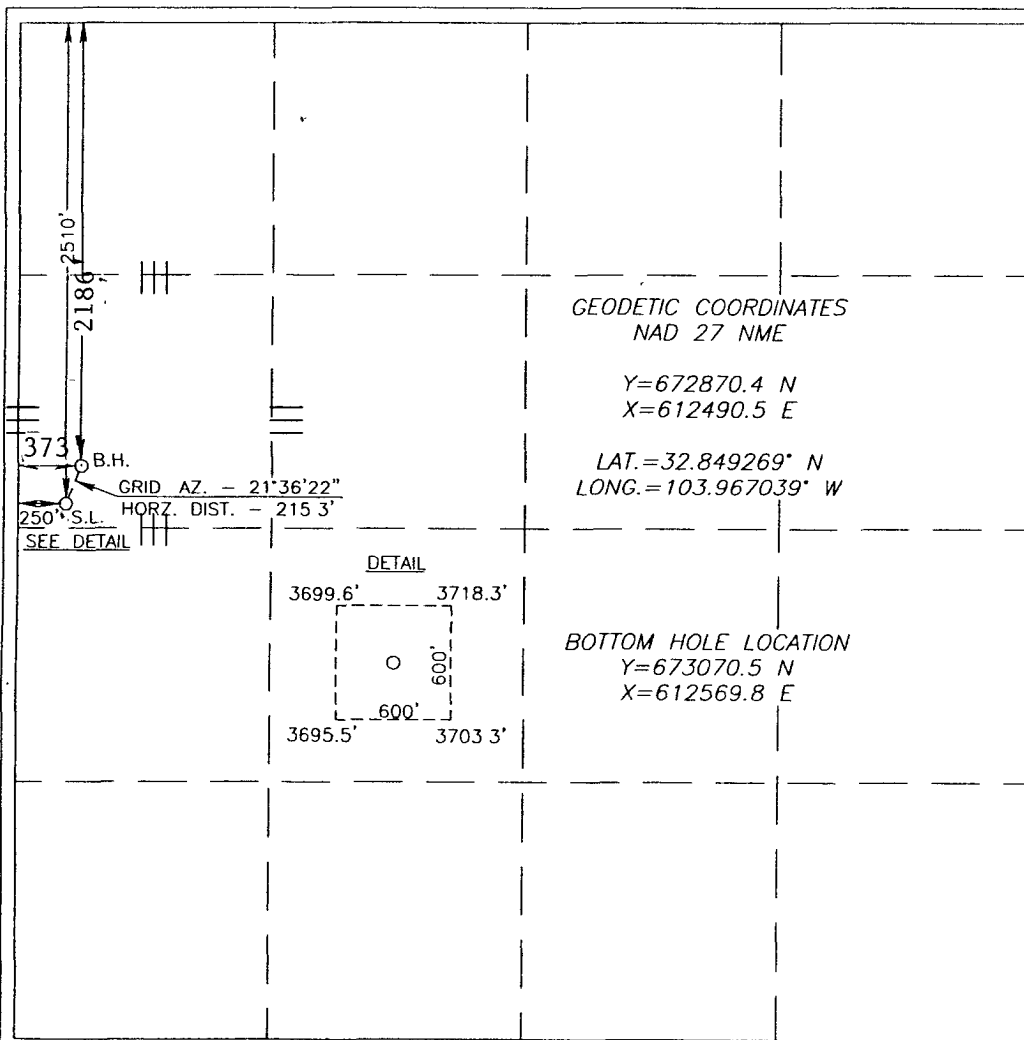
API Number 30-015-35979		Pool Code 96718	Pool Name LOCO HILLS; GLORIETA-YESO
Property Code 302483	Property Name ELECTRA FEDERAL		Well Number 23
OGRID No. 229137	Operator Name COG OPERATING, LLC		Elevation 3697'

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	17-S	30-E		2510	NORTH	250	WEST	EDDY

UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	17-S	30-E		2186	NORTH	373	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



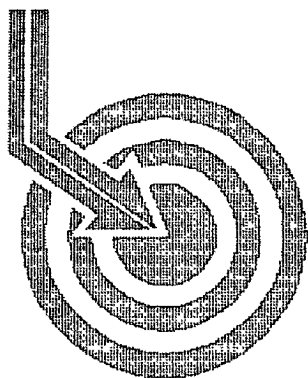
I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Phyllis A. Edwards 10/9/07
Signature Date

Phyllis A. Edwards
Printed Name

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 belief.

SEPTEMBER 2007
Date Surveyed: _____ REV: 9/24/07
Signature & Seal of
Professional Surveyor
12641
RECEIVED
9/24/07
07.11.0991
Certificate No. RYAN EIDSON 12641
RONALD EIDSON 3239



Scientific Drilling

COG RESOURCES

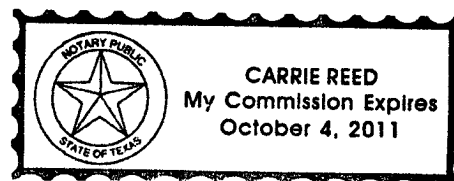
Field: Loco Hills
Site: Eddy County, NM
Well: Electra Federal #23
Wellpath: VH - Job #32K0808658
Survey: 08/23/08

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

.....Luhan..... Company Representative

Notorized this date 16th of September, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





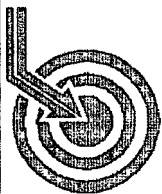
Scientific Drilling International Survey Report

Company: COG RESOURCES Date: 09/16/2008 Time: 14:48:23 Page: 1
Field: Loco Hills Co-ordinate(NE) Reference: Site: Eddy County, NM; Grid North
Site: Eddy County, NM Vertical (TVD) Reference: SITE 0.0
Well: Electra Federal #23 Section (VS) Reference: Well (0.00N,0.00E,21.60Azi)
Wellpath: VH - Job #32K0808658 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 08/23/08 Start Date: 08/23/2008
KSRG 0'-1300'
Company: Scientific Drilling Internatio Engineer: Pena w/GeoGyro
Tool: Keeper;Keeper Gyro Tied-to: From Surface

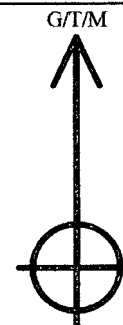
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	359.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.88	250.96	100.00	-0.50	-0.25	-0.73	0.88	0.77	250.96
200.00	1.20	133.38	199.99	-1.39	-1.22	-0.69	1.79	1.40	209.51
300.00	1.24	174.85	299.97	-2.74	-3.02	0.17	0.86	3.02	176.82
400.00	0.55	107.28	399.96	-3.67	-4.24	0.72	1.15	4.30	170.32
500.00	1.48	154.74	499.94	-4.52	-5.55	1.73	1.18	5.81	162.66
600.00	1.67	107.64	599.91	-5.30	-7.16	3.67	1.27	8.04	152.84
700.00	1.42	122.46	699.87	-5.44	-8.26	6.11	0.47	10.28	143.54
800.00	2.12	99.20	799.82	-5.27	-9.22	8.98	0.99	12.87	135.78
900.00	2.12	104.61	899.76	-4.65	-9.99	12.59	0.20	16.07	128.42
1000.00	1.91	101.02	999.69	-4.12	-10.77	16.02	0.24	19.30	123.92
1100.00	2.11	98.25	1099.63	-3.39	-11.35	19.48	0.22	22.54	120.24
1200.00	2.00	94.50	1199.57	-2.45	-11.76	23.04	0.17	25.86	117.03
1300.00	1.89	99.90	1299.51	-1.60	-12.18	26.40	0.21	29.07	114.76



Scientific
Drilling

Field: Loco Hills
Site: Eddy County, NM
Well: Electra Federal #23
Wellpath: VH - Job #32K0808658
Survey: 08/23/08

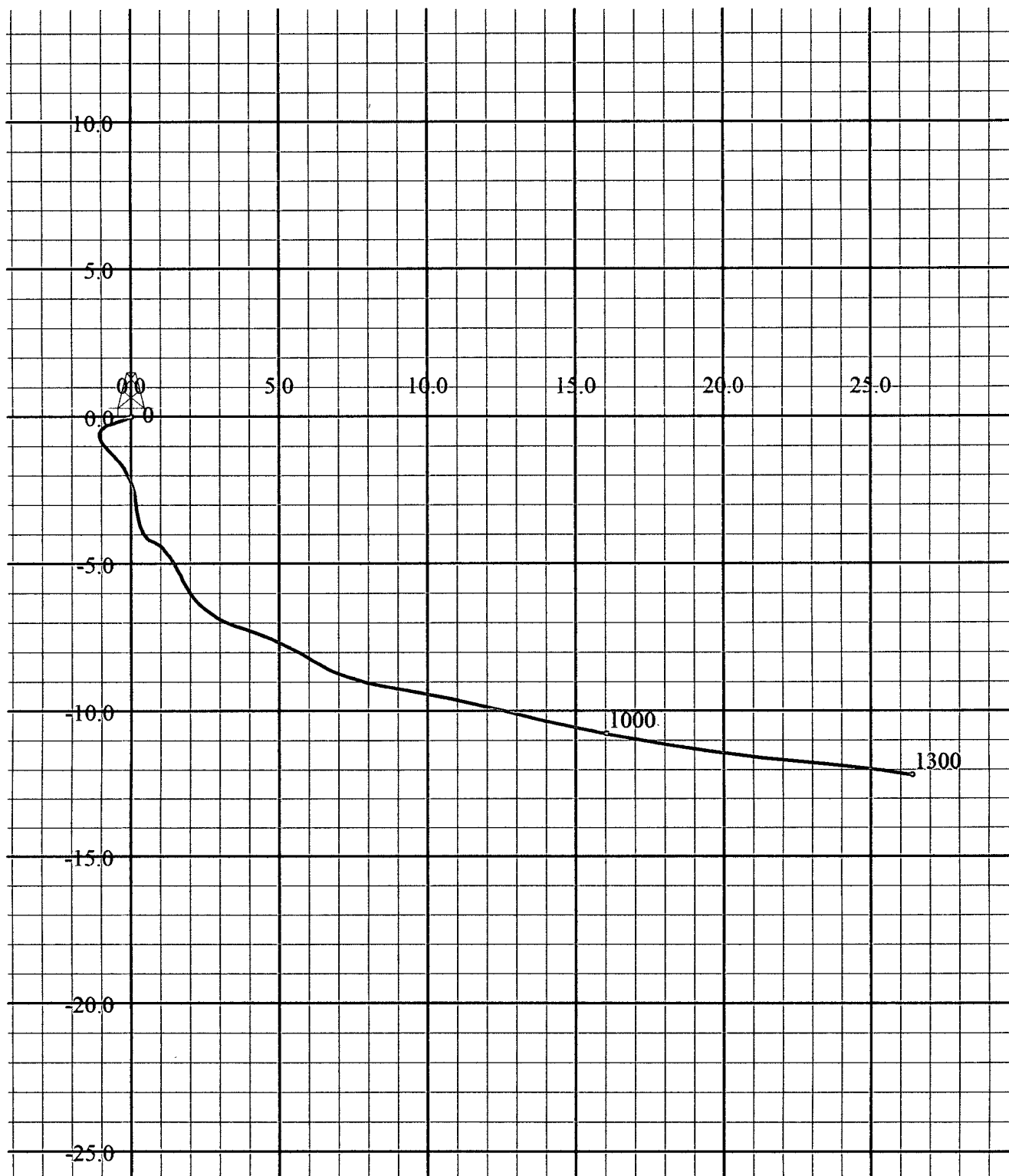


G/T/M
Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 09/16/2008
Model: igrf2000

West(-)/East(+) [5ft/in]

South(-)/North(+) [5ft/in]



Survey Report

Report Date: September 2, 2008	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: COG Operating, LLC.	Vertical Section Azimuth: 23 030°
Field: Eddy County, NM	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: Electra Federal #23 / Electra Federal #23	TVD Reference Datum: RKB
Well: Electra Federal #23	TVD Reference Elevation: 0 0 ft relative to
Borehole: Electra Federal #23	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8 142°
Survey Name / Date: Electra Federal #23_surveys / August 25, 2008	Total Field Strength: 49281 596 nT
Tort / AHD / DDI / ERD ratio: 40 888° / 390 79 ft / 4.205 / 0.066	Magnetic Dip: 60 780°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: August 25, 2008
Location Lat/Long: N 32 50 57.369, W 103 58 1.341	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 672870 400 ftUS, E 612490.500 ftUS	North Reference: Grid North
Grid Convergence Angle: +0.19869113°	Total Corr Mag North -> Grid North: +7.943°
Grid Scale Factor: 0.99992358	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)
Tie-In	1300.00	1.89	99.90	1299.51	-0.88	-12.18	26.40	29.07	114.76	0.21	117.20M
	1391.00	1.30	117.20	1390.47	-0.61	-12.91	28.80	31.56	114.14	0.83	84.50M
	1423.00	1.80	84.50	1422.46	-0.40	-13.02	29.62	32.36	113.73	3.11	75.50M
	1455.00	3.20	75.50	1454.43	0.39	-12.75	30.99	33.51	112.37	4.53	60.70M
	1487.00	4.80	60.70	1486.35	1.99	-11.87	33.02	35.09	109.78	5.91	50.30M
	1519.00	4.90	50.30	1518.24	4.26	-10.35	35.24	36.73	106.36	2.76	34.20M
	1550.00	4.10	34.20	1549.15	6.53	-8.58	36.88	37.87	103.10	4.80	18.60M
	1582.00	4.10	18.60	1581.06	8.79	-6.55	37.89	38.45	99.81	3.47	19.10M
	1614.00	4.00	19.10	1612.98	11.05	-4.41	38.62	38.87	96.52	0.33	15.60M
	1646.00	3.80	15.60	1644.91	13.21	-2.34	39.27	39.34	93.41	0.97	9.00M
	1678.00	4.10	9.00	1676.83	15.37	-0.19	39.73	39.73	90.27	1.70	357.90M
	1709.00	4.10	357.90	1707.76	17.45	2.02	39.87	39.92	87.11	2.56	352.50M
	1741.00	4.10	352.50	1739.67	19.47	4.29	39.67	39.91	83.82	1.21	5.20M
	1773.00	4.40	5.20	1771.59	21.63	6.65	39.64	40.19	80.48	3.08	10.70M
	1805.00	4.80	10.70	1803.48	24.10	9.19	40.00	41.04	77.06	1.86	11.30M
	1837.00	5.00	11.30	1835.37	26.78	11.87	40.52	42.22	73.67	0.65	90.00R
	1868.00	5.00	12.20	1866.25	29.43	14.52	41.07	43.56	70.53	0.25	134.60L
	1900.00	4.90	11.00	1898.13	32.13	17.22	41.62	45.04	67.52	0.45	177.65L
	1932.00	4.70	10.90	1930.02	34.75	19.85	42.13	46.57	64.77	0.63	173.29R
	1964.00	4.50	11.20	1961.91	37.26	22.37	42.62	48.14	62.31	0.63	162.96L
	1996.00	4.40	10.80	1993.82	39.69	24.81	43.10	49.73	60.08	0.33	130.28L
	2027.00	4.30	9.20	2024.73	41.98	27.12	43.51	51.27	58.06	0.51	87.21R
	2123.00	4.50	23.80	2120.45	49.24	34.12	45.60	56.95	53.20	1.18	171.29R
	2218.00	4.00	24.90	2215.19	56.28	40.53	48.50	63.21	50.11	0.53	90.00L
	2313.00	4.00	17.60	2309.96	62.89	46.70	50.90	69.07	47.46	0.54	174.37R
	2409.00	3.30	18.80	2405.76	68.98	52.51	52.80	74.46	45.16	0.73	5.98L
	2504.00	3.60	18.30	2500.59	74.68	57.93	54.62	79.61	43.32	0.32	90.00L
	2600.00	3.60	16.00	2596.40	80.67	63.68	56.39	85.07	41.53	0.15	65.46L
	2695.00	3.70	12.80	2691.21	86.65	69.54	57.90	90.49	39.78	0.24	173.24R
	2790.00	3.40	13.40	2786.02	92.44	75.27	59.23	95.78	38.20	0.32	41.38L
	2886.00	4.00	6.20	2881.82	98.45	81.37	60.25	101.25	36.52	0.79	18.28L
	2980.00	4.70	3.40	2975.55	105.22	88.47	60.83	107.37	34.51	0.78	172.63L
	3075.00	4.00	2.10	3070.28	111.98	95.67	61.18	113.56	32.60	0.74	103.63R
	3173.00	3.90	11.10	3168.05	118.43	102.36	61.95	119.64	31.18	0.64	0.75R
	3268.00	4.50	11.20	3262.79	125.24	109.18	63.30	126.20	30.10	0.63	HS
	3363.00	4.70	11.20	3357.49	132.70	116.66	64.78	133.43	29.04	0.21	38.73R
	3457.00	5.20	15.50	3451.13	140.69	124.54	66.66	141.26	28.16	0.66	131.22L
	3550.00	4.80	9.70	3543.78	148.66	132.43	68.44	149.08	27.33	0.69	90.00L

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)
	3645.00	4.80	9.10	3638.45	156.38	140.28	69.74	156.66	26.44	0.05	111.74R
	3738.00	4.70	12.40	3731.13	163.90	147.84	71.18	164.08	25.71	0.31	107.30R
	3832.00	4.60	17.00	3824.82	171.44	155.21	73.11	171.56	25.22	0.41	90.00R
	3925.00	4.60	18.10	3917.52	178.86	162.32	75.35	178.96	24.90	0.09	90.00R
	4018.00	4.60	19.90	4010.22	186.30	169.37	77.78	186.38	24.67	0.16	161.00L
	4112.00	4.40	19.00	4103.93	193.66	176.32	80.24	193.72	24.47	0.23	48.07R
	4205.00	4.50	20.40	4196.65	200.86	183.11	82.67	200.91	24.30	0.16	72.50R
	4299.00	4.60	24.00	4290.35	208.32	190.01	85.49	208.36	24.22	0.32	145.48R
	4392.00	4.30	26.80	4383.07	215.52	196.53	88.58	215.57	24.26	0.40	140.81L
	4485.00	4.00	23.20	4475.83	222.25	202.63	91.43	222.30	24.29	0.43	32.10L
	4579.00	4.90	16.80	4569.55	229.52	209.48	93.88	229.56	24.14	1.09	163.66L
	4672.00	4.60	15.70	4662.23	237.16	216.88	96.04	237.19	23.89	0.34	145.80L
	4765.00	4.20	11.90	4754.95	244.20	223.80	97.75	244.22	23.59	0.53	84.09R
	4859.00	4.30	19.70	4848.70	251.10	230.48	99.65	251.10	23.38	0.62	90.00R
	4953.00	4.30	22.00	4942.43	258.14	237.07	102.16	258.14	23.31	0.18	15.84L
	5046.00	5.20	19.20	5035.11	265.83	244.28	104.85	265.83	23.23	1.00	114.66L
	5139.00	5.00	13.60	5127.74	274.03	252.20	107.19	274.03	23.03	0.58	11.93L
	5234.00	5.50	12.50	5222.34	282.59	260.67	109.15	282.60	22.72	0.54	154.85R
	5329.00	5.40	13.00	5316.91	291.47	269.47	111.14	291.49	22.41	0.12	90.00L
	5422.00	5.40	9.70	5409.50	300.04	278.05	112.86	300.08	22.09	0.33	141.16R
	5515.00	5.20	11.50	5502.10	308.43	286.49	114.44	308.50	21.77	0.28	90.00R
	5609.00	5.20	13.20	5595.72	316.80	294.81	116.26	316.91	21.52	0.16	90.00L
	5702.00	5.20	9.80	5688.34	325.05	303.07	117.94	325.21	21.26	0.33	158.69R
	5796.00	4.70	12.20	5781.98	332.98	311.03	119.48	333.19	21.01	0.58	137.29R
	5890.00	4.50	14.60	5875.68	340.41	318.36	121.22	340.66	20.84	0.30	157.67R
	5912.00	4.30	15.70	5897.62	342.08	319.99	121.66	342.34	20.82	0.99	---
Projected TD	5972.00	4.30	15.70	5957.45	346.55	324.32	122.88	346.82	20.75	0.00	---

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COG Operating, LLC.

WELL Electra Federal #23	FIELD Eddy County, NM	STRUCTURE Electra Federal #23
Magnetic Parameters Model IGRF 2005	Dip 60.780° Mag Dec +8.142° Date FS August 25, 2008 49261.6 nT	Surface Location Lat N32 50 57.369 Lon W103 58 1.341 NAD27 New Mexico State Planes Eastern Zone US Feet Northing 672870.40 ftUS Easting 612490.50 ftUS Grid Conv -0.19869113° Scale Fact 0.9999235816

Miscellaneous Slot Electra Federal #23 Plan Electra Federal #23_surveys	TVD Ref RKB (0.00 ft above) Srvy Date August 25, 2008
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