

NM OIL CONSERVATION ARTESIA DISTRICT

APR 24 2015

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM0107697

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.
SCREWDRIER 24 FEDERAL COM 2H

9. API Well No.
30-015-42914

10. Field and Pool, or Exploratory
LUSK; BONE SPRING, WEST

11. Sec., T., R., M., or Block and Survey
or Area Sec 24 T19S R31E Mer NMP

12. County or Parish
EDDY

13. State
NM

17. Elevations (DF, KB, RT, GL)*
3544 GL

16. Date Completed
☐ D & A ☒ Ready to Prod.
04/03/2015

15. Date T.D. Reached
02/21/2015

14. Date Spudded
02/02/2015

19. Plug Back T.D.: MD 13790
TVD 9210

18. Total Depth: MD 13841
TVD 9210

20. Depth Bridge Plug Set: MD 13790
TVD 9210

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
NONE

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	16.000 J55	65.0	0	774		900		0	
14.750	11.750 J55	47.0	0	2765		1350		0	
10.625	8.625 J55	32.0	0	4338	2789	1400		0	
7.875	5.500 P110	17.0	0	13841		2200		0	

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	8662								

25. Producing Intervals					26. Perforation Record			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status		
A) BONE SPRING	9384	13750	9384 TO 13690	0.430	540	OPEN		
B)			13740 TO 13750		60	OPEN		
C)								
D)								

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.									
- Depth Interval			Amount and Type of Material						
9384 TO 13690			SEE IN REMARKS						

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
04/04/2015	04/12/2015	24	→	646.0	540.0	1565.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
SI	360	100.0	→	646	540	1565		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.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
SI			→						

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #298810 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	

28c. Production - Interval D									
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.)
FLARED

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.

30. Summary of Porous Zones (Include Aquifers):				31. Formation (Log) Markers	
Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
BRUSHY CANYON	5360	7019		RUSTLER	734
BONE SPRING LM	7020	8279		TOS	814
1ST BONE SPRING	8280	9220		TANSILL	2409
				YATES	2564
				SEVEN RIVERS	2759
				REEF	2829
				BASE OF REEF	4365
				BRUSHY CANYON	5360

32. Additional remarks (include plugging procedure):
 Perfs 7 1/2" Sand (#) Fluid (gal)
 13494-13690 7098 451748 476448
 13197-13396 6048 450045 375690
 12907-13103 6384 453217 372960
 12611-12809 6090 450135 377580
 12320-12516 6006 451047 373632
 12022-12222 6024 451577 371214
 11733-11928 6066 448776 369702

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 #298810 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Carlsbad

Name (please print) STORMI DAVIS Title REGULATORY ANALYST
 Signature (Electronic Submission) Date 04/21/2015

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 ****

Additional data for transaction #298810 that would not fit on the form

32. Additional remarks, continued

11439-11635 6006 450050 371322
11146-11341 5964 453516 372102
10852-11047 6048 451058 368634
10562-10754 6048 450512 378714
10265-10459 5964 451745 366660
9972-10167 6132 451355 368424
9678-9868 6090 449082 375984
9384-9580 6006 455673 369978
Totals 91973 6769536 5689043

Additional Tops:
Bone Spring Lm 7020
1st Bone Spring 8280

Surveys attached.



February 20, 2015

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

Attn: Kanicia Castillo

RE: **Screwdriver 24 Federal Com 2H**

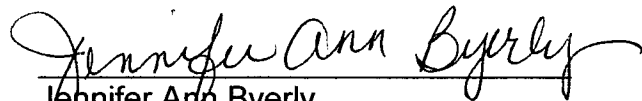
Please find enclosed a copy of the survey from 0' to 8528' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 20 day of Feb.,
A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas



Company: Concho
Lease/Well: Screwdriver 24 Federal Com /2H
Location: S 24 - T 19/S - R 31/E
Rig Name: McVay 6
State/County: New Mexico/Eddy
Latitude: 32.64, Longitude: -103.81
GRID North is 0.28 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 19 FT

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 2/20/2015 / 15:54

VES Survey International

West Texas

(432) 563-5444

Surveyor: Cody Johnson

Screwdriver 24 Federal Com 2H / API 30-015-42914

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 24 2015
RECEIVED

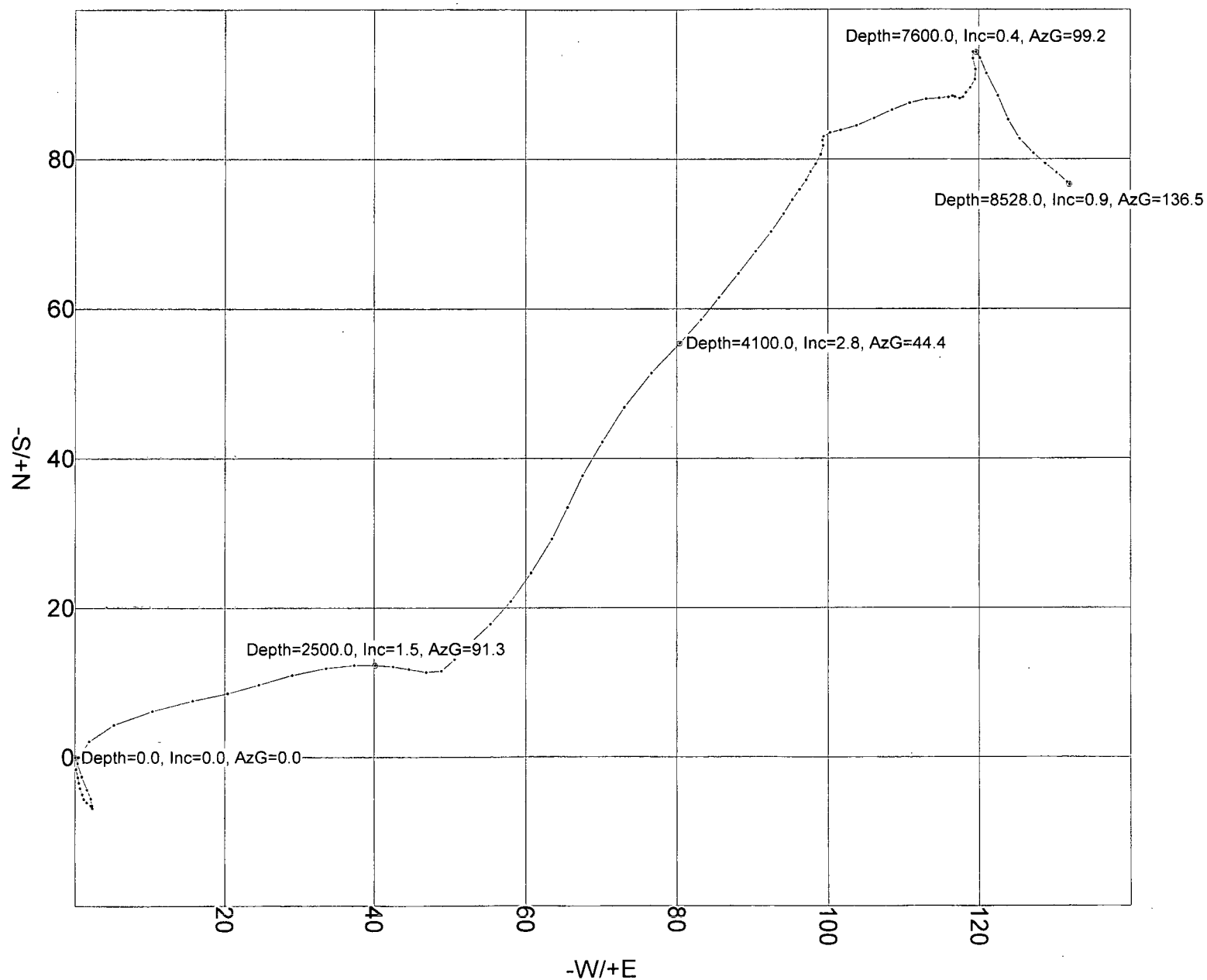
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	1.01	155.93	99.99	-0.81	0.36	-0.81	0.88	155.93	1.01
200.00	1.15	169.25	199.98	-2.60	0.91	-2.60	2.75	160.76	0.29
300.00	1.02	146.93	299.96	-4.34	1.58	-4.34	4.62	159.96	0.44
400.00	0.51	176.00	399.95	-5.53	2.10	-5.53	5.92	159.20	0.63
500.00	0.59	166.71	499.95	-6.48	2.25	-6.48	6.86	160.84	0.11
600.00	0.16	337.73	599.94	-6.84	2.31	-6.84	7.22	161.31	0.75
700.00	0.33	316.63	699.94	-6.50	2.06	-6.50	6.82	162.40	0.19
800.00	0.46	306.11	799.94	-6.05	1.54	-6.05	6.25	165.74	0.15
900.00	0.25	350.99	899.94	-5.60	1.18	-5.60	5.72	168.12	0.34
1000.00	0.53	335.32	999.94	-4.97	0.95	-4.97	5.06	169.16	0.30
1100.00	0.47	347.58	1099.93	-4.15	0.67	-4.15	4.20	170.83	0.12
1200.00	0.38	351.76	1199.93	-3.42	0.53	-3.42	3.46	171.12	0.09
1300.00	0.47	343.93	1299.93	-2.69	0.37	-2.69	2.72	172.13	0.10
1400.00	0.82	353.36	1399.92	-1.59	0.18	-1.59	1.60	173.67	0.37
1500.00	1.11	22.87	1499.91	0.02	0.47	0.02	0.47	87.45	0.57
1600.00	1.82	40.04	1599.87	2.13	1.87	2.13	2.84	41.25	0.83
1700.00	2.84	66.31	1699.79	4.34	5.16	4.34	6.75	49.91	1.45
1800.00	3.47	73.67	1799.64	6.19	10.33	6.19	12.05	59.08	0.75

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	2.93	77.81	1899.49	7.58	15.73	7.58	17.47	64.27	0.59
2000.00	2.53	78.63	1999.37	8.55	20.39	8.55	22.11	67.24	0.40
2100.00	2.46	70.31	2099.28	9.71	24.58	9.71	26.43	68.44	0.37
2200.00	2.84	77.53	2199.17	10.97	29.02	10.97	31.03	69.29	0.51
2300.00	2.55	79.80	2299.06	11.90	33.64	11.90	35.68	70.51	0.31
2400.00	1.72	89.52	2398.99	12.31	37.33	12.31	39.31	71.75	0.91
2500.00	1.52	91.26	2498.95	12.29	40.16	12.29	42.00	72.98	0.20
2600.00	1.17	98.43	2598.92	12.12	42.50	12.12	44.19	74.09	0.39
2700.00	1.27	100.31	2698.90	11.77	44.60	11.77	46.13	75.22	0.11
2800.00	1.40	99.07	2798.87	11.38	46.90	11.38	48.26	76.37	0.13
2900.00	1.05	64.63	2898.85	11.57	48.93	11.57	50.28	76.69	0.80
3000.00	1.62	38.54	2998.82	13.07	50.63	13.07	52.29	75.53	0.82
3100.00	1.86	47.44	3098.78	15.27	52.71	15.27	54.88	73.84	0.36
3200.00	2.36	44.57	3198.71	17.84	55.35	17.84	58.15	72.14	0.52
3300.00	2.25	39.11	3298.63	20.83	58.04	20.83	61.66	70.25	0.25
3400.00	3.12	32.03	3398.52	24.67	60.72	24.67	65.54	67.89	0.93
3500.00	2.96	29.69	3498.38	29.22	63.45	29.22	69.85	65.27	0.20
3600.00	2.44	21.96	3598.27	33.43	65.52	33.43	73.55	62.97	0.64
3700.00	2.93	27.78	3698.16	37.66	67.50	37.66	77.30	60.84	0.56
3800.00	3.09	31.77	3798.02	42.21	70.11	42.21	81.84	58.95	0.27
3900.00	3.18	32.93	3897.87	46.83	73.04	46.83	86.76	57.33	0.10
4000.00	3.49	42.72	3997.70	51.39	76.61	51.39	92.25	56.15	0.65
4100.00	2.81	44.36	4097.55	55.38	80.39	55.38	97.62	55.44	0.69
4200.00	2.05	38.33	4197.46	58.53	83.21	58.53	101.73	54.88	0.80
4300.00	2.36	39.65	4297.38	61.52	85.63	61.52	105.44	54.31	0.32
4400.00	2.35	37.75	4397.30	64.73	88.20	64.73	109.40	53.73	0.08
4500.00	1.95	38.17	4497.23	67.69	90.51	67.69	113.02	53.21	0.40
4600.00	1.82	37.83	4597.18	70.28	92.53	70.28	116.20	52.78	0.13
4700.00	1.55	31.24	4697.13	72.69	94.21	72.69	118.99	52.35	0.33
4800.00	0.95	30.39	4797.11	74.57	95.33	74.57	121.03	51.97	0.60
4900.00	0.96	38.80	4897.09	75.94	96.28	75.94	122.62	51.74	0.14
5000.00	0.82	29.64	4997.08	77.21	97.16	77.21	124.11	51.53	0.20
5100.00	0.61	25.61	5097.07	78.32	97.74	78.32	125.25	51.30	0.22
5200.00	0.84	38.95	5197.07	79.36	98.43	79.36	126.44	51.12	0.29
5300.00	0.82	14.89	5297.06	80.63	99.08	80.63	127.74	50.86	0.35
5400.00	0.59	13.93	5397.05	81.83	99.39	81.83	128.74	50.54	0.23
5500.00	0.32	316.78	5497.04	82.54	99.32	82.54	129.14	50.27	0.50
5600.00	0.50	47.01	5597.04	83.04	99.45	83.04	129.56	50.14	0.59
5700.00	0.64	69.30	5697.04	83.53	100.29	83.53	130.52	50.21	0.26

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
5800.00	1.07	79.31	5797.03	83.90	101.73	83.90	131.86	50.48	0.45
5900.00	1.40	70.10	5897.00	84.49	103.80	84.49	133.84	50.85	0.39
6000.00	1.52	64.49	5996.97	85.48	106.15	85.48	136.29	51.15	0.18
6100.00	1.46	65.53	6096.94	86.58	108.50	86.58	138.81	51.41	0.07
6200.00	1.44	70.86	6196.91	87.52	110.85	87.52	141.24	51.71	0.14
6300.00	1.12	83.98	6296.88	88.04	113.01	88.04	143.26	52.08	0.44
6400.00	0.84	90.29	6396.87	88.14	114.72	88.14	144.67	52.47	0.29
6500.00	0.57	74.57	6496.86	88.26	115.93	88.26	145.71	52.72	0.33
6600.00	0.10	42.07	6596.86	88.46	116.47	88.46	146.26	52.78	0.48
6700.00	0.40	128.45	6696.86	88.32	116.80	88.32	146.43	52.91	0.40
6800.00	0.42	93.19	6796.85	88.08	117.44	88.08	146.80	53.13	0.25
6900.00	0.27	16.13	6896.85	88.29	117.87	88.29	147.27	53.17	0.45
7000.00	0.55	42.01	6996.85	88.87	118.26	88.87	147.93	53.07	0.33
7100.00	0.48	38.87	7096.84	89.56	118.84	89.56	148.81	53.00	0.08
7200.00	0.96	25.33	7196.84	90.64	119.47	90.64	149.96	52.81	0.51
7300.00	0.75	335.60	7296.83	92.00	119.56	92.00	150.85	52.42	0.75
7400.00	0.99	354.07	7396.82	93.45	119.20	93.45	151.46	51.90	0.37
7500.00	0.12	81.86	7496.81	94.33	119.21	94.33	152.02	51.65	0.99
7600.00	0.36	99.18	7596.81	94.29	119.63	94.29	152.32	51.75	0.25
7700.00	0.86	165.69	7696.80	93.51	120.13	93.51	152.23	52.10	0.79
7800.00	1.69	152.61	7796.78	91.47	120.99	91.47	151.68	52.91	0.88
7900.00	2.16	153.07	7896.72	88.48	122.52	88.48	151.13	54.16	0.47
8000.00	1.84	161.61	7996.66	85.28	123.88	85.28	150.40	55.46	0.44
8100.00	1.63	135.68	8096.62	82.74	125.38	82.74	150.22	56.58	0.80
8200.00	1.44	137.65	8196.58	80.79	127.23	80.79	150.71	57.58	0.20
8300.00	0.94	123.06	8296.56	79.42	128.76	79.42	151.28	58.33	0.58
8400.00	1.29	133.94	8396.54	78.19	130.25	78.19	151.92	59.02	0.41
8500.00	0.88	129.85	8496.52	76.92	131.65	76.92	152.48	59.70	0.41
8528.00	0.86	136.47	8524.52	76.63	131.97	76.63	152.60	59.86	0.37



VES Survey International
West Texas
(432) 563-5444
Surveyor: Cody Johnson
Screwdriver 24 Federal Com 2H / API 30-015-42914



VES Survey Date: 2/12/2015

Archer Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 2H
Project:	Eddy County, NM	TVD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Site:	Screwdriver 24 Fed Com 2H	MD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Well:	2H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Project	Eddy County, NM		
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		Screwdriver 24 Fed Com 2H			
Site Position:		Northing:	597,336.30 usft	Latitude:	32° 38' 27.99 N
From:	Map	Easting:	659,763.70 usft	Longitude:	103° 48' 51.54 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.28 °

Well	2H					
Well Position	+N/-S	0.00 usft	Northing:	597,336.30 usft	Latitude:	32° 38' 27.99 N
	+E/-W	0.00 usft	Easting:	659,763.70 usft	Longitude:	103° 48' 51.54 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,544.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	2/6/2015	7.53	60.65	48,631

Design	Surveys				
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	263.63	

Survey Program	Date	2/23/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	8,528.00	Gyro (Lateral)	GYRO-NS	Gyrocompass Gyro	
8,556.00	13,841.00	MWD (Lateral)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Screwdriver 24 Fed Com 2H SHL										
100.00	1.01	155.93	99.99	-0.80	0.36	-0.27	1.01	1.01	0.00	
200.00	1.15	169.25	199.98	-2.60	0.91	-0.61	0.29	0.14	13.32	
300.00	1.02	146.93	299.96	-4.33	1.58	-1.09	0.44	-0.13	-22.32	
400.00	0.51	176.00	399.95	-5.52	2.10	-1.47	0.63	-0.51	29.07	
500.00	0.59	166.71	499.95	-6.46	2.25	-1.51	0.12	0.08	-9.29	
600.00	0.16	337.73	599.94	-6.83	2.31	-1.54	0.75	-0.43	171.02	
700.00	0.33	316.63	699.94	-6.50	2.06	-1.33	0.19	0.17	-21.10	
800.00	0.46	306.11	799.94	-6.05	1.54	-0.86	0.15	0.13	-10.52	

Archer Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 2H
Project:	Eddy County, NM	TVD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Site:	Screwdriver 24 Fed Com 2H	MD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Well:	2H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
900.00	0.25	350.99	899.94	-5.60	1.18	-0.55	0.33	-0.21	44.88	
1,000.00	0.53	335.32	999.94	-4.96	0.95	-0.40	0.30	0.28	-15.67	
1,100.00	0.47	347.58	1,099.93	-4.14	0.67	-0.21	0.12	-0.06	12.26	
1,200.00	0.38	351.76	1,199.93	-3.41	0.53	-0.15	0.10	-0.09	4.18	
1,300.00	0.47	343.93	1,299.93	-2.69	0.37	-0.07	0.11	0.09	-7.83	
1,400.00	0.82	353.36	1,399.92	-1.58	0.18	0.00	0.36	0.35	9.43	
1,500.00	1.11	22.87	1,499.91	0.02	0.47	-0.47	0.57	0.29	29.51	
1,600.00	1.82	40.04	1,599.87	2.13	1.87	-2.09	0.83	0.71	17.17	
1,700.00	2.84	66.31	1,699.79	4.34	5.16	-5.61	1.45	1.02	26.27	
1,800.00	3.47	73.67	1,799.64	6.18	10.33	-10.95	0.75	0.63	7.36	
1,900.00	2.93	77.81	1,899.49	7.57	15.74	-16.48	0.59	-0.54	4.14	
2,000.00	2.53	78.63	1,999.37	8.55	20.40	-21.22	0.40	-0.40	0.82	
2,100.00	2.46	70.31	2,099.28	9.71	24.58	-25.51	0.37	-0.07	-8.32	
2,200.00	2.84	77.53	2,199.17	10.97	29.02	-30.06	0.51	0.38	7.22	
2,300.00	2.55	79.80	2,299.06	11.89	33.63	-34.74	0.31	-0.29	2.27	
2,400.00	1.72	89.52	2,398.99	12.30	37.32	-38.45	0.90	-0.83	9.72	
2,500.00	1.52	91.26	2,498.95	12.28	40.15	-41.26	0.21	-0.20	1.74	
2,600.00	1.17	98.43	2,598.92	12.11	42.48	-43.56	0.39	-0.35	7.17	
2,700.00	1.27	100.31	2,698.90	11.76	44.58	-45.61	0.11	0.10	1.88	
2,800.00	1.40	99.07	2,798.87	11.37	46.88	-47.85	0.13	0.13	-1.24	
2,900.00	1.05	64.63	2,898.85	11.57	48.91	-49.89	0.80	-0.35	-34.44	
3,000.00	1.62	38.54	2,998.82	13.06	50.62	-51.76	0.82	0.57	-26.09	
3,100.00	1.86	47.44	3,098.78	15.27	52.70	-54.07	0.36	0.24	8.90	
3,200.00	2.36	44.57	3,198.71	17.83	55.34	-56.97	0.51	0.50	-2.87	
3,300.00	2.25	39.11	3,298.63	20.82	58.02	-59.97	0.25	-0.11	-5.46	
3,400.00	3.12	32.03	3,398.52	24.65	60.70	-63.06	0.93	0.87	-7.08	
3,500.00	2.96	29.69	3,498.38	29.20	63.43	-66.27	0.20	-0.16	-2.34	
3,600.00	2.44	21.96	3,598.27	33.42	65.50	-68.80	0.63	-0.52	-7.73	
3,700.00	2.93	27.78	3,698.16	37.66	67.49	-71.25	0.56	0.49	5.82	
3,800.00	3.09	31.77	3,798.02	42.21	70.10	-74.35	0.26	0.16	3.99	
3,900.00	3.18	32.93	3,897.87	46.83	73.02	-77.77	0.11	0.09	1.16	
4,000.00	3.49	42.72	3,997.70	51.39	76.60	-81.83	0.65	0.31	9.79	
4,100.00	2.81	44.36	4,097.55	55.38	80.38	-86.02	0.69	-0.68	1.64	
4,200.00	2.05	38.33	4,197.46	58.54	83.20	-89.18	0.80	-0.76	-6.03	
4,300.00	2.36	39.65	4,297.38	61.52	85.62	-91.92	0.31	0.31	1.32	
4,400.00	2.35	37.75	4,397.30	64.73	88.19	-94.83	0.08	-0.01	-1.90	
4,500.00	1.95	38.17	4,497.23	67.69	90.50	-97.45	0.40	-0.40	0.42	
4,600.00	1.82	37.83	4,597.18	70.28	92.52	-99.75	0.13	-0.13	-0.34	
4,700.00	1.55	31.24	4,697.13	72.69	94.20	-101.68	0.33	-0.27	-6.59	
4,800.00	0.95	30.39	4,797.11	74.56	95.32	-103.00	0.60	-0.60	-0.85	
4,900.00	0.96	38.80	4,897.09	75.93	96.26	-104.09	0.14	0.01	8.41	
5,000.00	0.82	29.64	4,997.08	77.21	97.14	-105.11	0.20	-0.14	-9.16	
5,100.00	0.61	25.61	5,097.07	78.31	97.73	-105.81	0.22	-0.21	-4.03	

Archer

Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 2H
Project:	Eddy County, NM	TVD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Site:	Screwdriver 24 Fed Com 2H	MD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Well:	2H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,200.00	0.84	38.95	5,197.07	79.36	98.42	-106.61	0.28	0.23	13.34	
5,300.00	0.82	14.89	5,297.06	80.62	99.06	-107.39	0.35	-0.02	-24.06	
5,400.00	0.59	13.93	5,397.05	81.81	99.37	-107.83	0.23	-0.23	-0.96	
5,500.00	0.32	316.78	5,497.05	82.51	99.30	-107.84	0.50	-0.27	-57.15	
5,600.00	0.50	47.01	5,597.04	83.02	99.43	-108.03	0.59	0.18	90.23	
5,700.00	0.64	69.30	5,697.04	83.51	100.27	-108.92	0.26	0.14	22.29	
5,800.00	1.07	79.31	5,797.03	83.88	101.71	-110.39	0.45	0.43	10.01	
5,900.00	1.40	70.10	5,897.00	84.47	103.78	-112.51	0.38	0.33	-9.21	
6,000.00	1.52	64.49	5,996.97	85.46	106.12	-114.95	0.19	0.12	-5.61	
6,100.00	1.46	65.53	6,096.94	86.56	108.48	-117.41	0.07	-0.06	1.04	
6,200.00	1.44	70.86	6,196.91	87.50	110.83	-119.85	0.14	-0.02	5.33	
6,300.00	1.12	83.98	6,296.88	88.01	112.99	-122.05	0.43	-0.32	13.12	
6,400.00	0.84	90.29	6,396.87	88.11	114.69	-123.76	0.30	-0.28	6.31	
6,500.00	0.57	74.57	6,496.86	88.24	115.90	-124.98	0.33	-0.27	-15.72	
6,600.00	0.10	42.07	6,596.86	88.43	116.44	-125.53	0.49	-0.47	-32.50	
6,700.00	0.40	128.45	6,696.86	88.28	116.77	-125.85	0.41	0.30	86.38	
6,800.00	0.42	93.19	6,796.85	88.04	117.41	-126.45	0.25	0.02	-35.26	
6,900.00	0.27	16.13	6,896.85	88.25	117.84	-126.91	0.45	-0.15	-77.06	
7,000.00	0.55	42.01	6,996.85	88.83	118.23	-127.35	0.33	0.28	25.88	
7,100.00	0.48	38.87	7,096.85	89.52	118.81	-128.01	0.08	-0.07	-3.14	
7,200.00	0.96	25.33	7,196.84	90.60	119.44	-128.75	0.51	0.48	-13.54	
7,300.00	0.75	335.60	7,296.83	91.95	119.52	-128.99	0.74	-0.21	-49.73	
7,400.00	0.99	354.07	7,396.82	93.41	119.16	-128.79	0.37	0.24	18.47	
7,500.00	0.12	81.86	7,496.81	94.28	119.18	-128.90	0.99	-0.87	87.79	
7,600.00	0.36	99.18	7,596.81	94.25	119.59	-129.31	0.25	0.24	17.32	
7,700.00	0.86	165.69	7,696.81	93.47	120.09	-129.72	0.79	0.50	66.51	
7,800.00	1.69	152.61	7,796.78	91.43	120.95	-130.35	0.87	0.83	-13.08	
7,900.00	2.16	153.07	7,896.72	88.44	122.48	-131.54	0.47	0.47	0.46	
8,000.00	1.84	161.61	7,996.66	85.24	123.84	-132.53	0.44	-0.32	8.54	
8,100.00	1.63	135.68	8,096.62	82.70	125.34	-133.74	0.80	-0.21	-25.93	
8,200.00	1.44	137.65	8,196.58	80.75	127.18	-135.36	0.20	-0.19	1.97	
8,300.00	0.94	123.06	8,296.56	79.38	128.72	-136.73	0.58	-0.50	-14.59	
8,400.00	1.29	133.94	8,396.54	78.15	130.22	-138.08	0.41	0.35	10.88	
8,500.00	0.88	129.85	8,496.52	76.88	131.62	-139.33	0.42	-0.41	-4.09	
8,528.00	0.86	136.47	8,524.52	76.59	131.93	-139.61	0.37	-0.07	23.64	
8,556.00	1.00	122.70	8,552.52	76.30	132.28	-139.92	0.94	0.50	-49.18	
8,588.00	0.70	170.50	8,584.51	75.96	132.54	-140.15	2.32	-0.94	149.38	
8,620.00	4.60	246.00	8,616.48	75.24	131.40	-138.94	13.99	12.19	235.94	
8,651.00	8.70	245.70	8,647.26	73.77	128.13	-135.52	13.23	13.23	-0.97	
8,683.00	12.70	243.40	8,678.70	71.20	122.78	-129.92	12.57	12.50	-7.19	
8,715.00	16.40	248.10	8,709.67	67.94	115.44	-122.26	12.13	11.56	14.69	
8,747.00	19.40	250.10	8,740.12	64.44	106.25	-112.74	9.57	9.38	6.25	
8,778.00	22.80	254.00	8,769.04	61.03	95.63	-101.81	11.86	10.97	12.58	

Archer

Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 2H
Project:	Eddy County, NM	TVD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Site:	Screwdriver 24 Fed Com 2H	MD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Well:	2H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,810.00	25.80	255.60	8,798.20	57.59	82.92	-88.80	9.60	9.38	5.00	
8,842.00	27.60	255.00	8,826.78	53.94	69.01	-74.57	5.69	5.63	-1.88	
8,874.00	29.50	255.50	8,854.89	50.05	54.22	-59.44	5.98	5.94	1.56	
8,906.00	32.30	258.00	8,882.35	46.30	38.23	-43.13	9.62	8.75	7.81	
8,937.00	35.50	259.00	8,908.08	42.86	21.29	-25.91	10.48	10.32	3.23	
8,969.00	37.90	258.90	8,933.73	39.19	2.52	-6.85	7.50	7.50	-0.31	
9,001.00	40.40	258.50	8,958.54	35.23	-17.29	13.28	7.85	7.81	-1.25	
9,033.00	41.90	259.30	8,982.64	31.18	-37.95	34.26	4.97	4.69	2.50	
9,065.00	43.60	258.80	9,006.14	27.05	-59.28	55.91	5.42	5.31	-1.56	
9,096.00	44.60	257.90	9,028.40	22.70	-80.41	77.39	3.81	3.23	-2.90	
9,128.00	46.60	258.60	9,050.79	18.04	-102.79	100.15	6.44	6.25	2.19	
9,155.92	48.43	258.07	9,069.64	13.88	-122.95	120.65	6.71	6.56	-1.88	
Screwdriver 24 Fed Com 2H PP										
9,160.00	48.70	258.00	9,072.34	13.25	-125.94	123.70	6.71	6.57	-1.82	
9,191.00	52.70	257.70	9,091.97	8.20	-149.39	147.56	12.92	12.90	-0.97	
9,223.00	55.60	259.00	9,110.71	2.96	-174.79	173.38	9.64	9.06	4.06	
9,255.00	58.90	258.40	9,128.02	-2.31	-201.18	200.19	10.43	10.31	-1.88	
9,286.00	61.50	257.80	9,143.43	-7.86	-227.50	226.97	8.55	8.39	-1.94	
9,318.00	66.20	257.20	9,157.53	-14.08	-255.53	255.52	14.78	14.69	-1.88	
9,350.00	70.70	256.30	9,169.28	-20.90	-284.50	285.06	14.30	14.06	-2.81	
9,384.00	74.50	257.00	9,179.44	-28.39	-316.06	317.26	11.35	11.18	2.06	
9,415.00	76.90	257.50	9,187.10	-35.02	-345.35	347.11	7.90	7.74	1.61	
9,447.00	81.70	257.60	9,193.04	-41.79	-376.05	378.37	15.00	15.00	0.31	
9,479.00	85.00	257.00	9,196.74	-48.78	-407.05	409.95	10.48	10.31	-1.88	
9,510.00	89.40	255.40	9,198.26	-56.17	-437.11	440.65	15.10	14.19	-5.16	
9,542.00	91.40	254.30	9,198.04	-64.53	-468.00	472.27	7.13	6.25	-3.44	
9,637.00	88.80	256.50	9,197.87	-88.47	-559.92	566.28	3.59	-2.74	2.32	
9,732.00	88.80	259.50	9,199.86	-108.22	-652.81	660.79	3.16	0.00	3.16	
9,827.00	89.20	261.30	9,201.52	-124.06	-746.46	755.62	1.94	0.42	1.89	
9,923.00	89.10	263.40	9,202.94	-136.83	-841.59	851.58	2.19	-0.10	2.19	
9,986.00	89.30	263.30	9,203.82	-144.13	-904.16	914.57	0.35	0.32	-0.16	
10,081.00	90.00	265.30	9,204.40	-153.56	-998.68	1,009.56	2.23	0.74	2.11	
10,176.00	90.10	265.10	9,204.32	-161.51	-1,093.35	1,104.52	0.24	0.11	-0.21	
10,271.00	90.10	265.10	9,204.15	-169.63	-1,188.00	1,199.49	0.00	0.00	0.00	
10,366.00	89.90	265.10	9,204.15	-177.74	-1,282.66	1,294.46	0.21	-0.21	0.00	
10,461.00	89.50	265.40	9,204.65	-185.61	-1,377.33	1,389.42	0.53	-0.42	0.32	
10,554.00	89.30	265.60	9,205.62	-192.91	-1,470.04	1,482.36	0.30	-0.22	0.22	
10,649.00	89.20	265.90	9,206.87	-199.94	-1,564.77	1,577.29	0.33	-0.11	0.32	
10,744.00	90.00	266.10	9,207.53	-206.57	-1,659.53	1,672.21	0.87	0.84	0.21	
10,839.00	89.90	266.40	9,207.61	-212.78	-1,754.33	1,767.11	0.33	-0.11	0.32	
10,934.00	89.50	266.50	9,208.11	-218.67	-1,849.15	1,861.99	0.43	-0.42	0.11	
11,028.00	88.70	266.40	9,209.59	-224.49	-1,942.95	1,955.86	0.86	-0.85	-0.11	
11,124.00	87.30	265.00	9,212.94	-231.68	-2,038.62	2,051.74	2.06	-1.46	-1.46	
11,220.00	88.30	263.40	9,216.62	-241.37	-2,134.05	2,147.66	1.96	1.04	-1.67	

Archer

Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 2H
Project:	Eddy County, NM	TVD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Site:	Screwdriver 24 Fed Com 2H	MD Reference:	3544' GL + 19' RKB @ 3563.00usft (McVay 6)
Well:	2H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,316.00	88.50	262.70	9,219.30	-252.99	-2,229.31	2,243.61	0.76	0.21	-0.73	
11,411.00	90.30	263.20	9,220.30	-264.64	-2,323.58	2,338.60	1.97	1.89	0.53	
11,507.00	90.20	263.00	9,219.88	-276.18	-2,418.89	2,434.59	0.23	-0.10	-0.21	
11,603.00	91.10	263.00	9,218.79	-287.88	-2,514.16	2,530.58	0.94	0.94	0.00	
11,699.00	91.30	263.00	9,216.78	-299.57	-2,609.43	2,626.55	0.21	0.21	0.00	
11,794.00	91.10	262.90	9,214.79	-311.23	-2,703.69	2,721.53	0.24	-0.21	-0.11	
11,890.00	93.10	264.10	9,211.27	-322.09	-2,799.00	2,817.45	2.43	2.08	1.25	
11,985.00	93.10	263.70	9,206.14	-332.17	-2,893.32	2,912.31	0.42	0.00	-0.42	
12,081.00	93.70	264.10	9,200.44	-342.35	-2,988.61	3,008.14	0.75	0.63	0.42	
12,177.00	92.40	264.60	9,195.33	-351.79	-3,084.01	3,104.00	1.45	-1.35	0.52	
12,273.00	90.90	266.30	9,192.57	-359.40	-3,179.66	3,199.90	2.36	-1.56	1.77	
12,368.00	89.40	266.70	9,192.32	-365.20	-3,274.48	3,294.78	1.63	-1.58	0.42	
12,464.00	89.50	266.10	9,193.24	-371.23	-3,370.28	3,390.66	0.63	0.10	-0.63	
12,560.00	89.30	265.60	9,194.25	-378.18	-3,466.03	3,486.59	0.56	-0.21	-0.52	
12,655.00	89.30	265.60	9,195.41	-385.46	-3,560.74	3,581.52	0.00	0.00	0.00	
12,750.00	89.60	265.50	9,196.32	-392.83	-3,655.45	3,676.47	0.33	0.32	-0.11	
12,846.00	88.40	264.70	9,198.00	-401.03	-3,751.08	3,772.42	1.50	-1.25	-0.83	
12,942.00	88.10	264.70	9,200.93	-409.90	-3,846.63	3,868.36	0.31	-0.31	0.00	
13,038.00	89.40	263.90	9,203.02	-419.43	-3,942.13	3,964.32	1.59	1.35	-0.83	
13,133.00	89.50	263.90	9,203.93	-429.52	-4,036.58	4,059.32	0.11	0.11	0.00	
13,228.00	89.50	263.50	9,204.76	-439.95	-4,131.01	4,154.31	0.42	0.00	-0.42	
13,324.00	89.30	262.90	9,205.77	-451.31	-4,226.33	4,250.31	0.66	-0.21	-0.63	
13,420.00	89.50	262.90	9,206.77	-463.18	-4,321.58	4,346.29	0.21	0.21	0.00	
13,514.00	89.60	262.20	9,207.51	-475.37	-4,414.79	4,440.27	0.75	0.11	-0.74	
13,610.00	89.50	262.10	9,208.27	-488.48	-4,509.88	4,536.24	0.15	-0.10	-0.10	
13,706.00	89.70	262.00	9,208.94	-501.76	-4,604.96	4,632.20	0.23	0.21	-0.10	
13,774.00	89.70	262.30	9,209.29	-511.04	-4,672.32	4,700.17	0.44	0.00	0.44	
13,841.00	89.70	262.30	9,209.64	-520.02	-4,738.72	4,767.16	0.00	0.00	0.00	
Screwdriver 24 Fed Com 2H BHL - Screwdriver 24 Fed Com 2H PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Screwdriver 24 Fed Cor	0.00	0.00	0.00	0.00	0.00	597,336.30	659,763.70	32° 38' 27.99 N	103° 48' 51.54 W	
- hit/miss target										
- Shape										
- actual wellpath hits target center										
- Point										
Screwdriver 24 Fed Cor	0.00	0.00	9,045.07	-15.59	-139.72	597,320.71	659,623.99	32° 38' 27.84 N	103° 48' 53.18 W	
- actual wellpath misses target center by 41.88usft at 9156.53usft MD (9070.05 TVD, 13.78 N, -123.40 E)										
- Point										
Screwdriver 24 Fed Cor	0.00	0.00	9,209.64	-520.02	-4,738.72	596,816.28	655,024.99	32° 38' 23.07 N	103° 49' 46.99 W	
- actual wellpath hits target center										
- Point										

COG OPERATING, LLC

Field: Eddy County, NM
Site: Screwdriver 24 Fed Com 2H
Well: 2H
Wellbore: Lateral
Plan: Surveys

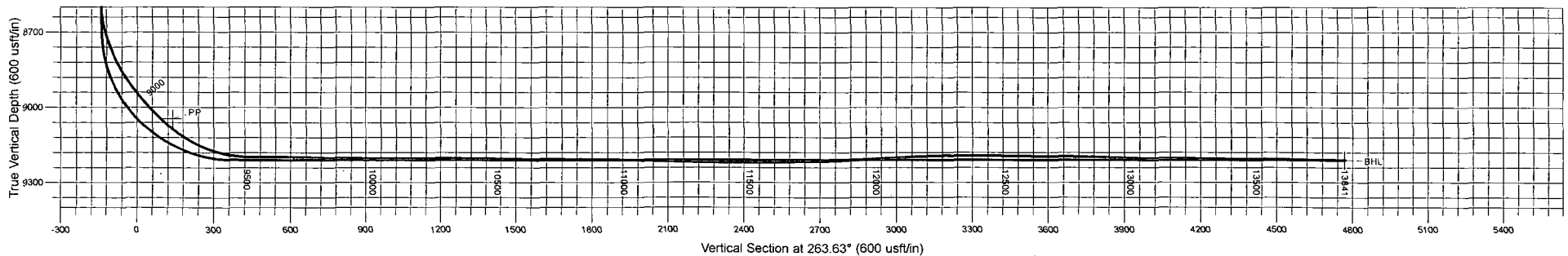
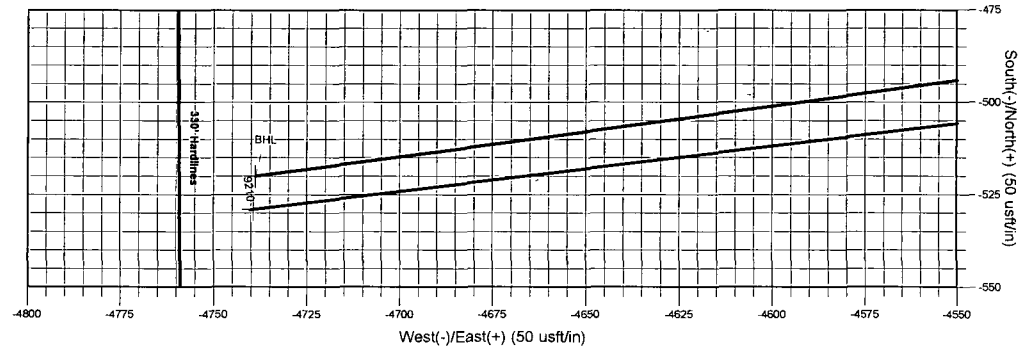
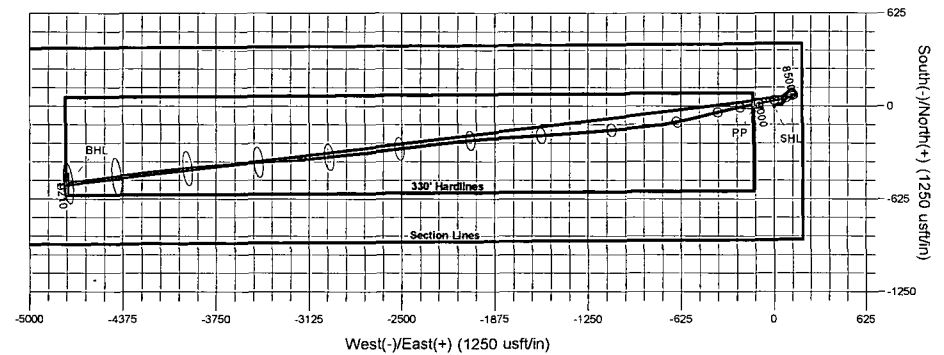
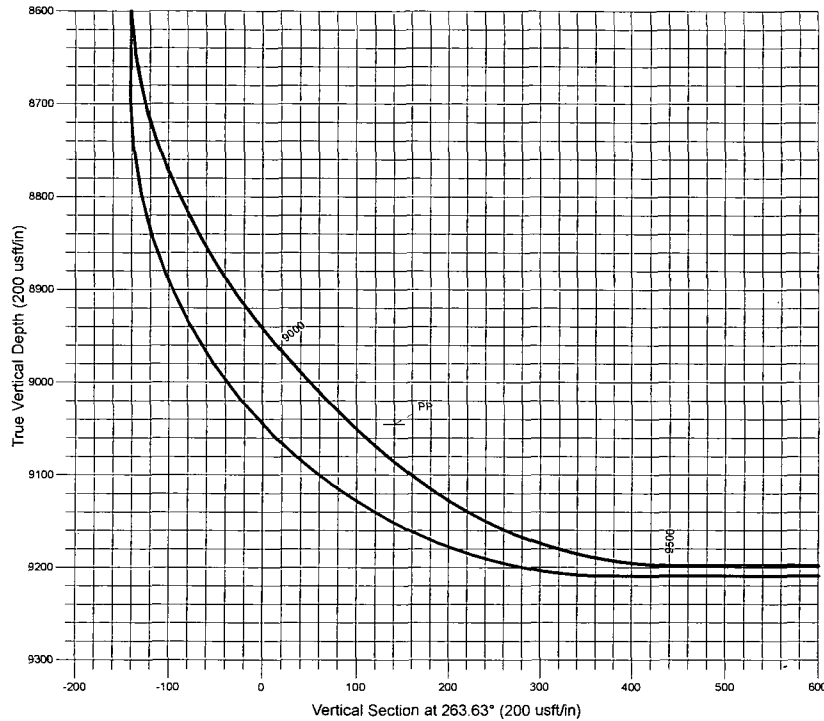


Section Distances

Sec24, T19S, R31E
SHL - Unit P
900' FSL, 190' FEL
PP - Unit P
885' FSL, 330' FEL
BHL - Unit M
411' FSL, 350' FWL

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Screwdriver 24 Fed Com 2H SHL	0.00	0.00	0.00	597336.30	659763.70	32° 38' 27.99 N	103° 48' 51.54 W
Screwdriver 24 Fed Com 2H PP	9045.06	-15.59	-139.72	597320.71	659623.98	32° 38' 27.84 N	103° 48' 53.18 W
Screwdriver 24 Fed Com 2H BHL	9209.64	-520.02	-4738.72	596816.28	655024.98	32° 38' 23.07 N	103° 49' 46.99 W



Archer

ARCHER DIRECTIONAL DRILLING SERVICES
12101 Cutten Rd. Houston, Texas 77066
Phone: 281-301-2600 Fax: 281-301-2795

Design: Surveys (2H/Lateral)
Created By: Keith Noack
Date: 10:35, February 23 2015

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM0107697
2. Name of Operator COG OPERATING LLC Contact: STORMI DAVIS E-Mail: sdavis@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address 2208 WEST MAIN ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6946	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 24 T19S R31E Mer NMP SESE 900FSL 190FEL		8. Well Name and No. SCREWDRIER 24 FEDERAL COM 2H
		9. API Well No. 30-015-42914
		10. Field and Pool, or Exploratory LUSK; BONE SPRING, WEST
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

3/3/15 MIRU. Install test plug & pressure test to 9500# for 15 mins. Set CBP @ 13790'. Test to 8503#. Good test. Perforate 13740-13750' (60). Injection test.

3/12/15 to 3/17/15 Perforate Bone Spring 9384-13690' (540). Acdz w/91973 gal 7 1/2% acid. Frac w/6769536# sand & 5689043 gal fluid.

3/28/15 to 4/1/15 Drill out all frac plugs & circulate clean.

4/3/15 Set 2 7/8" 6.5# L-80 tbg @ 8662'. Place well on pump.

4/4/15 Began flowing back & testing. Date of first production.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #298793 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad

Name (Printed/Typed) STORMI DAVIS

Title PREPARER

Signature (Electronic Submission)

Date 04/21/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office _____

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.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL CONSERVATION
ARTESIA DISTRICT

APR 24 2015

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM0107697
2. Name of Operator COG OPERATING LLC Contact: STORMI DAVIS E-Mail: sdavis@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address 2208 WEST MAIN ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6946	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 24 T19S R31E Mer NMP SESE 900FSL 190FEL		8. Well Name and No. SCREWDRIVER 24 FEDERAL COM 2H
		9. API Well No. 30-015-42914
		10. Field and Pool, or Exploratory LUSK; BONE SPRING, WEST
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Drilling Operations
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

2/2/15 Spud well. TD 20" hole @ 775'. Set 16" 65# J-55 csg @ 774'. Cmt w/600 sx Class C. Tailed in w/300 sx. Circ 319 sx to surface. WOC 18 hrs. Test csg to 2000#. Drilled out 5' below FS w/10# brine - no loss of circ.

2/6/15 TD 14 3/4" hole @ 2770'. Set 11 3/4" 47# J-55 csg @ 2765'. Cmt w/950 sx Class C. Tailed in w/400 sx. Circ 195 sx to surface. WOC 18 hrs. Test csg to 1500#. Drilled out 5' below FS w/10# brine - no loss of circ.

2/9/15 TD 10 5/8" hole @ 4350'. Set 8 5/8" 32# J-55 csg @ 4338'. Set DVT @ 2789'. Cmt Stage 1 w/350 sx Class C. Tailed in w/250 sx. Circ 227 sx. Cmt Stage 2 w/550 sx Class C. Tailed in w/250 sx. Circ 277 sx to surface. WOC 18 hrs. Test csg to 1500# for 30 mins. Drilled out 5' below FS w/10# brine - no loss of circ.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #293790 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad

Name (Printed/Typed) STORMI DAVIS

Title PREPARER

Signature (Electronic Submission)

Date 03/04/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office _____

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.

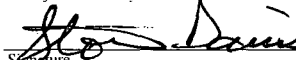
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

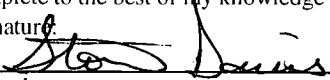
Additional data for EC transaction #293790 that would not fit on the form

32. Additional remarks, continued

2/21/15 TD 7 7/8" lateral @ 13841' (KOP @ 8589'). Set 5 1/2" 17# P-110 csg @ 13841'. Cmt w/900 sx Class H. Tailed in w/1300 sx. Circ 159 sx to surface.

2/23/15 Rig released.

16				17 OPERATOR CERTIFICATION I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  4/20/15 SignatureDate Stormi Davis Printed Name sdavis@concho.com E-mail Address
	Producing Interval 9384-13750'			18 SURVEYOR CERTIFICATION 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. Date of Survey Signature and Seal of Professional Surveyor: REFER TO ORIGINAL PLAT
331' BHL 409'	190' SHL 900'			Certificate Number

³¹ Date New Oil 4/4/15	³² Gas Delivery Date	³³ Test Date 4/12/15	³⁴ Test Length 24 Hrs	³⁵ Tbg. Pressure 360#	³⁶ Csg. Pressure 100#
³⁷ Choke Size	³⁸ Oil 646	³⁹ Water 1565	⁴⁰ Gas 540		⁴¹ Test Method Pumping
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature:  Printed name: Stormi Davis Title: Regulatory Analyst E-mail Address: sdavis@concho.com Date: 4/21/15			OIL CONSERVATION DIVISION		
			Approved by: _____		
			Title: _____		
			Approval Date: _____		
Phone: 575-748-6946					