

Concho

Eddy County, New Mexico (Nad27)
Grave Digger State Com #6H

OH

30-015-40955

Plan: Plan #2 01-09-13

Surface: 210' FNL, 2630' FEL, Sec 2, T20S, R25E, Unit B (Lot 2)

BHL: 330' FNL, 2600' FWL, Sec 2, T20S, R25E, Unit O

Standard Planning Report

09 January, 2013



Phoenix
Planning Report

Database:	GCR-DB	Local Co-ordinate Reference:	Well: #6H
Company:	Concho	TVD Reference:	RF @ 3471.00usft (UDI #40)
Project:	Eddy County, New Mexico (Nad27)	MD Reference:	RF @ 3471.00usft (UDI #40)
Site:	Grave Digger State Cor	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2, 01-09-13		

Project:	Eddy County, New Mexico (Nad27)		
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:	Grave Digger State Cor		
Site Position:	Map	Northing:	585,277.40 usft
From:		Easting:	464,199.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 36' 32.3219 N
		Longitude:	104° 26' 58.5446 W
		Grid Convergence:	-0.06 °

Well:	#6H					
Well Position	+N/-S	24.40 usft	Northing:	585,301.80 usft	Latitude:	32° 36' 32.5452 N
	+E/-W	-1,638.50 usft	Easting:	462,561.00 usft	Longitude:	104° 27' 17.7006 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,457.00 usft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010_14	01/09/13	7.83	60.35	48,592

Design:	Plan #2, 01-09-13			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	179.78

Plan Sections:										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,449.55	0.00	0.00	2,449.55	0.00	0.00	0.00	0.00	0.00	0.00	
3,272.28	90.50	179.78	2,970.40	-525.41	2.04	11.00	11.00	0.00	179.78	
7,466.36	90.50	179.78	2,933.80	-4,719.30	18.30	0.00	0.00	0.00	0.00	PBHL-Grave Digger #



Phoenix
Planning Report

Database	GCR DB	Local Co-ordinate Reference	Well #6H
Company	Concho	TVD Reference:	RF @ 3471.00usft (UDI #40)
Project	Eddy County, New Mexico (Nad27)	MD Reference:	RF @ 3471.00usft (UDI #40)
Site	Grave Digger State Com	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 01-09-13		

Planned 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
2,449.55	0.00	0.00	2,449.55	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 11.00									
2,500.00	5.55	179.78	2,499.92	-2.44	0.01	2.44	11.00	11.00	0.00
2,600.00	16.55	179.78	2,597.92	-21.58	0.08	21.58	11.00	11.00	0.00
2,700.00	27.55	179.78	2,690.46	-59.06	0.23	59.06	11.00	11.00	0.00
2,800.00	38.55	179.78	2,774.15	-113.51	0.44	113.51	11.00	11.00	0.00
2,900.00	49.55	179.78	2,845.91	-182.93	0.71	182.94	11.00	11.00	0.00
3,000.00	60.55	179.78	2,903.11	-264.77	1.03	264.77	11.00	11.00	0.00
3,100.00	71.55	179.78	2,943.65	-356.02	1.38	356.02	11.00	11.00	0.00
3,200.00	82.55	179.78	2,966.02	-453.33	1.76	453.33	11.00	11.00	0.00
3,272.28	90.50	179.78	2,970.40	-525.41	2.04	525.42	11.00	11.00	0.00
EOC Start 4194.08 hold at 3272.28 MD									
3,300.00	90.50	179.78	2,970.16	-553.13	2.14	553.14	0.00	0.00	0.00
3,400.00	90.50	179.78	2,969.29	-653.13	2.53	653.14	0.00	0.00	0.00
3,500.00	90.50	179.78	2,968.41	-753.13	2.92	753.13	0.00	0.00	0.00
3,600.00	90.50	179.78	2,967.54	-853.12	3.31	853.13	0.00	0.00	0.00
3,700.00	90.50	179.78	2,966.67	-953.12	3.70	953.12	0.00	0.00	0.00
3,800.00	90.50	179.78	2,965.79	-1,053.11	4.08	1,053.12	0.00	0.00	0.00
3,900.00	90.50	179.78	2,964.92	-1,153.11	4.47	1,153.12	0.00	0.00	0.00
4,000.00	90.50	179.78	2,964.05	-1,253.10	4.86	1,253.11	0.00	0.00	0.00
4,100.00	90.50	179.78	2,963.18	-1,353.10	5.25	1,353.11	0.00	0.00	0.00
4,200.00	90.50	179.78	2,962.30	-1,453.09	5.63	1,453.10	0.00	0.00	0.00
4,300.00	90.50	179.78	2,961.43	-1,553.09	6.02	1,553.10	0.00	0.00	0.00
4,400.00	90.50	179.78	2,960.56	-1,653.08	6.41	1,653.10	0.00	0.00	0.00
4,500.00	90.50	179.78	2,959.69	-1,753.08	6.80	1,753.09	0.00	0.00	0.00
4,600.00	90.50	179.78	2,958.81	-1,853.08	7.19	1,853.09	0.00	0.00	0.00
4,700.00	90.50	179.78	2,957.94	-1,953.07	7.57	1,953.09	0.00	0.00	0.00
4,800.00	90.50	179.78	2,957.07	-2,053.07	7.96	2,053.08	0.00	0.00	0.00
4,900.00	90.50	179.78	2,956.20	-2,153.06	8.35	2,153.08	0.00	0.00	0.00
5,000.00	90.50	179.78	2,955.32	-2,253.06	8.74	2,253.07	0.00	0.00	0.00
5,100.00	90.50	179.78	2,954.45	-2,353.05	9.12	2,353.07	0.00	0.00	0.00
5,200.00	90.50	179.78	2,953.58	-2,453.05	9.51	2,453.07	0.00	0.00	0.00
5,300.00	90.50	179.78	2,952.70	-2,553.04	9.90	2,553.06	0.00	0.00	0.00
5,400.00	90.50	179.78	2,951.83	-2,653.04	10.29	2,653.06	0.00	0.00	0.00
5,500.00	90.50	179.78	2,950.96	-2,753.03	10.68	2,753.06	0.00	0.00	0.00
5,600.00	90.50	179.78	2,950.09	-2,853.03	11.06	2,853.05	0.00	0.00	0.00
5,700.00	90.50	179.78	2,949.21	-2,953.03	11.45	2,953.05	0.00	0.00	0.00
5,800.00	90.50	179.78	2,948.34	-3,053.02	11.84	3,053.04	0.00	0.00	0.00
5,900.00	90.50	179.78	2,947.47	-3,153.02	12.23	3,153.04	0.00	0.00	0.00
6,000.00	90.50	179.78	2,946.60	-3,253.01	12.61	3,253.04	0.00	0.00	0.00
6,100.00	90.50	179.78	2,945.72	-3,353.01	13.00	3,353.03	0.00	0.00	0.00
6,200.00	90.50	179.78	2,944.85	-3,453.00	13.39	3,453.03	0.00	0.00	0.00
6,300.00	90.50	179.78	2,943.98	-3,553.00	13.78	3,553.02	0.00	0.00	0.00
6,400.00	90.50	179.78	2,943.11	-3,652.99	14.17	3,653.02	0.00	0.00	0.00
6,500.00	90.50	179.78	2,942.23	-3,752.99	14.55	3,753.02	0.00	0.00	0.00
6,600.00	90.50	179.78	2,941.36	-3,852.98	14.94	3,853.01	0.00	0.00	0.00
6,700.00	90.50	179.78	2,940.49	-3,952.98	15.33	3,953.01	0.00	0.00	0.00
6,800.00	90.50	179.78	2,939.62	-4,052.98	15.72	4,053.01	0.00	0.00	0.00
6,900.00	90.50	179.78	2,938.74	-4,152.97	16.10	4,153.00	0.00	0.00	0.00
7,000.00	90.50	179.78	2,937.87	-4,252.97	16.49	4,253.00	0.00	0.00	0.00
7,100.00	90.50	179.78	2,937.00	-4,352.96	16.88	4,352.99	0.00	0.00	0.00
7,200.00	90.50	179.78	2,936.12	-4,452.96	17.27	4,452.99	0.00	0.00	0.00
7,300.00	90.50	179.78	2,935.25	-4,552.95	17.65	4,552.99	0.00	0.00	0.00



Phoenix
Planning Report

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Company:	Concho	TVD Reference:	RF @ 3471.00usft (UDI #40)
Project:	Eddy County, New Mexico (Nad27)	MD Reference:	RF @ 3471.00usft (UDI #40)
Site:	Grave Digger State Com	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 01-09-13		

Planned 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)
7,400.00	90.50	179.78	2,934.38	-4,652.95	18.04	4,652.98	0.00	0.00	0.00
7,466.36	90.50	179.78	2,933.80	-4,719.30	18.30	4,719.34	0.00	0.00	0.00
TD at 7466.36 - PBHL-Grave Digger #6H									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL-Grave Digger #6H	0.00	360.00	2,933.80	-4,719.30	18.30	580,582.50	462,579.30	32° 35' 45.8444 N	104° 27' 17.4236 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
2,449.55	2,449.55	0.00	0.00	KOP Start Build 11.00
3,272.28	2,970.40	-525.41	2.04	EOC Start 4194.08 hold at 3272.28 MD
7,466.36	2,933.80	-4,719.30	18.30	TD at 7466.36



Concho

Project: Eddy County, New Mexico (Nad27)

Site: Grave Digger State Com

Well: #6H

Wellbore: OH

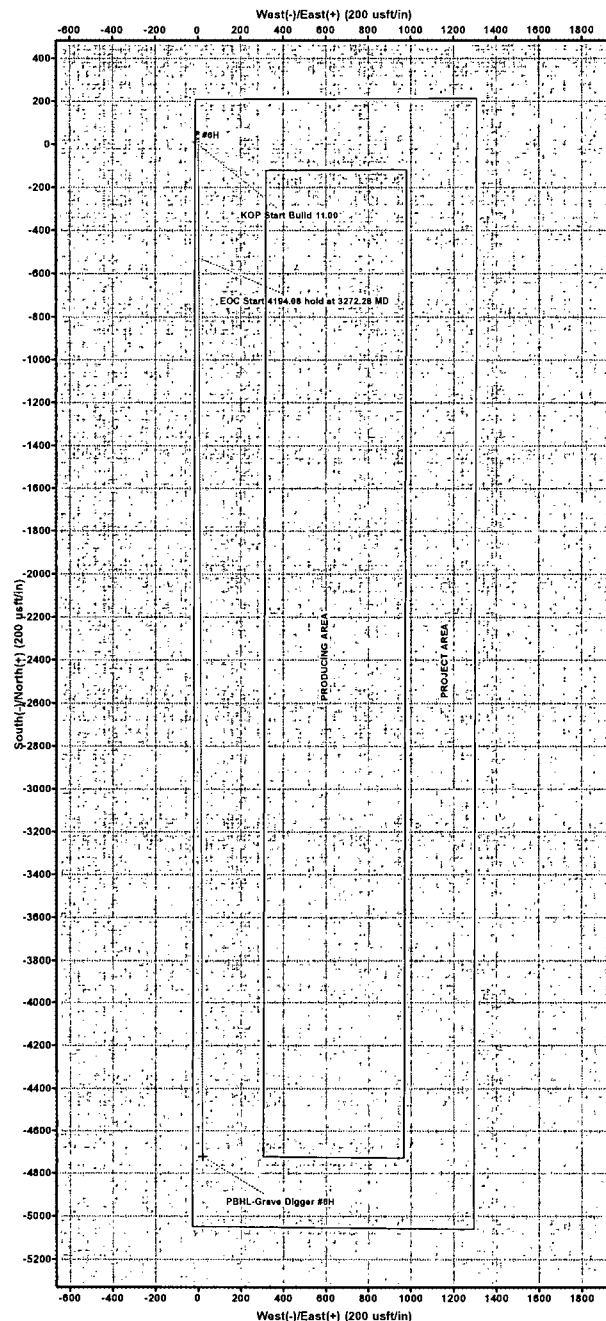
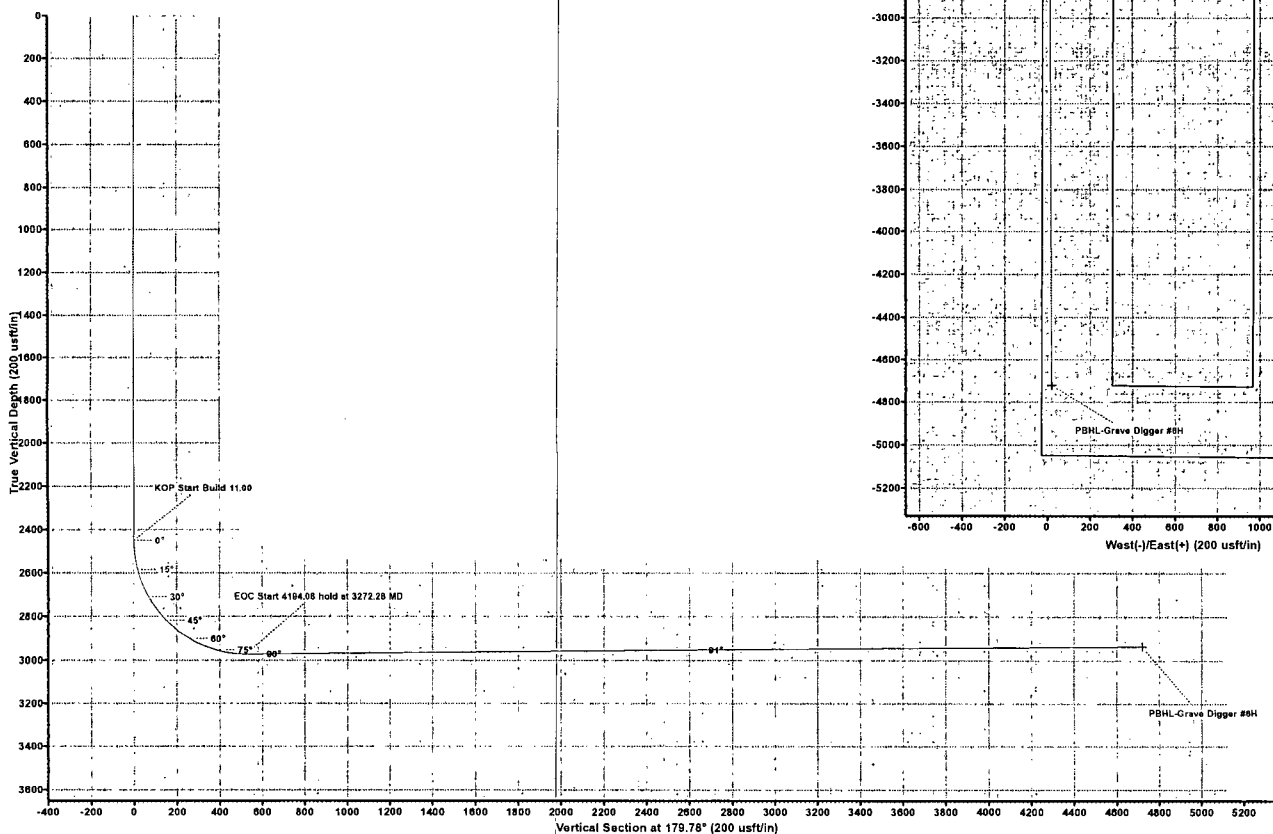
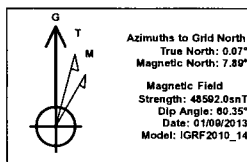
Plan: Plan #2 01-09-13



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2449.55	90.50	179.78	2449.55	0.00	0.00	0.00	0.00	0.00	
3272.28	90.50	179.78	2870.40	-525.41	2.04	11.00	179.78	525.42	
7466.36	90.50	179.78	2933.80	-4719.30	18.30	0.00	0.00	4719.34	PBHL-Grave Digger #6H

WELL DETAILS: #6H			
Ground Level:	3457.00		
North	585301.80	East	462561.0032° 36' 32.5452 MD 4° 27' 17.7006 W

ANNOTATIONS		
TVD	MD	Annotation
2449.55	2449.55	KOP Start Build 11.00
2970.40	3272.28	EOC Start 4194.08 hold at 3272.28 MD
2933.80	7466.36	TD at 7466.36



DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 97565	Pool Name N. Seven Rivers; Glorieta-Yeso
Property Code 308178	Property Name GRAVE DIGGER STATE COM	Well Number 6H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3457'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	2	20-S	25-E		210	NORTH	2630	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	2	20-S	25-E		330	SOUTH	2600	EAST	EDDY

Dedicated Acres 160.32	Joint or Infill	Consolidation Code	Order No.
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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

CORNER COORDINATES TABLE A - Y=585511.7 N, X=462548.4 E B - Y=585516.2 N, X=463869.6 E C - Y=580253.0 N, X=462532.4 E D - Y=580241.0 N, X=463855.1 E GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=585301.8 N X=462561.0 E BOTTOM HOLE LOCATION Y=580582.5 N X=462579.3 E PRODUCING AREA 40.06 AC. 40.08 AC. 40.10 AC. 40.15 AC. PROJECT AREA 3465.8' 3459.6' 3457.7' 3451.8' DETAIL 600' 600' CRID. AZ = 179°46'41" HORIZ. DIST = 4720.6'	OPERATOR CERTIFICATION 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.  Signature 1-10-13 Date Kelly J. Holly Printed Name kholly@concho.com E-mail Address 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. DECEMBER 13, 2012 Date of Survey Signature & Seal of Professional Surveyor:  Certificate Number: Gary S. Eidson 12641 Ronald J. Eidson 3239 AF JWSC W.O.: 12.11.1969
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