

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
511 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

NM OIL CONSERVATION
State of New Mexico
Energy, Minerals & Natural Resources Department
ARTESIA DISTRICT
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

JAN 07 2015
RECEIVED
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 42886	Pool Code 97788	Pool Name Wildcat G-01 S192617K; Glor-Yeso
Property Code 39004	Property Name BRADLEY 8 FEE	
OGRID No. 229137	Operator Name COG OPERATING, LLC	
		Well Number 7H
		Elevation 3373'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	8	19-S	26-E		165	SOUTH	1650	EAST	EDDY

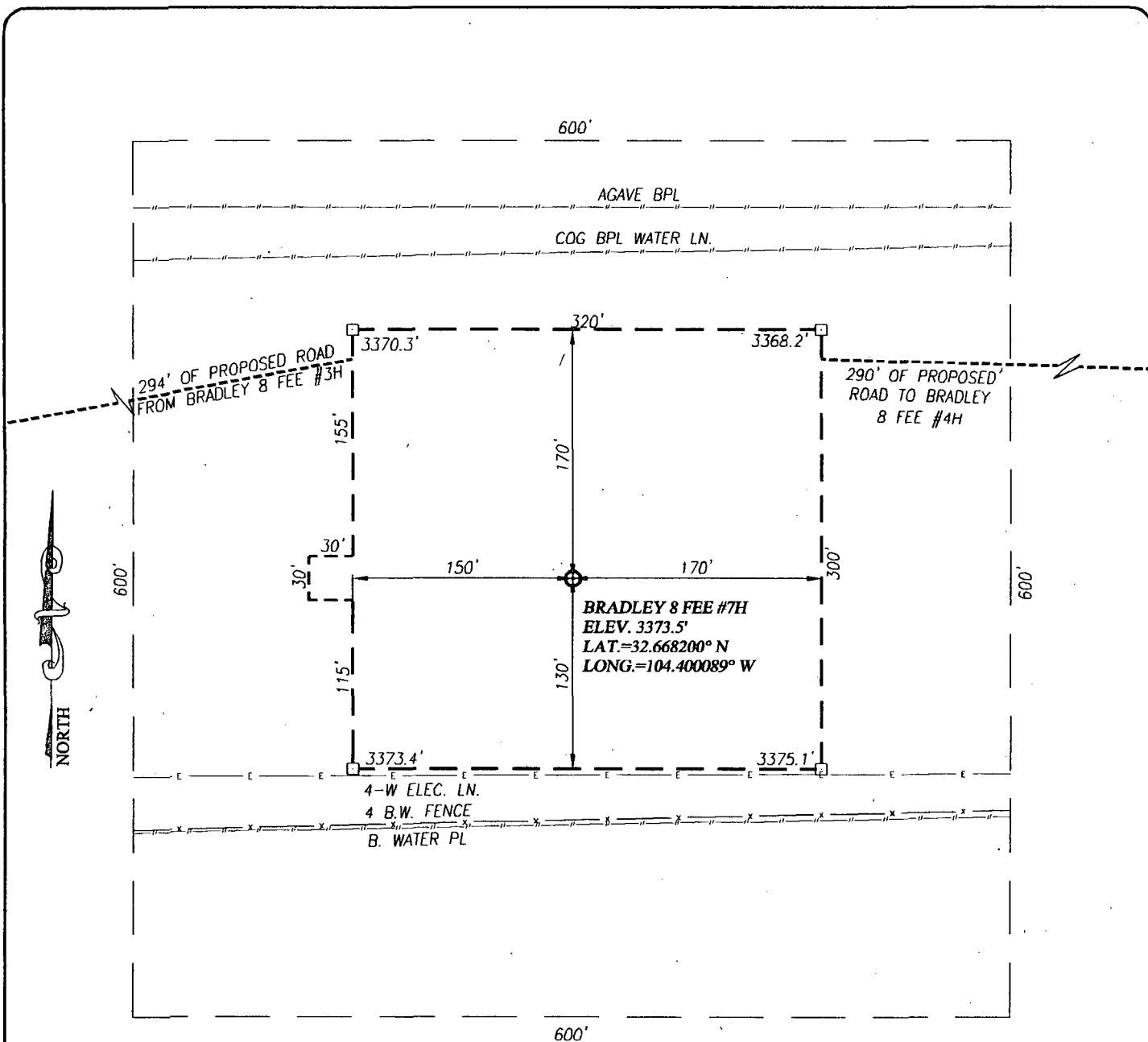
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	19-S	26-E		330	NORTH	1650	EAST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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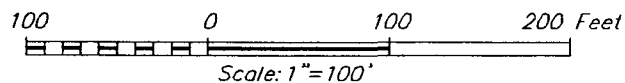
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GEODETC COORDINATES NAD 27 NME BOTTOM HOLE LOCATION Y=611643.9 N X=479356.1 E		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: Date: 12-30-14 Printed Name: Kelly J. Holly E-mail Address: kholly@concho.com				
CORNER COORDINATES TABLE NAD 27 NME <table style="width: 100%;"> <tr> <td>A - Y=611973.4 N, X=478369.1 E</td> </tr> <tr> <td>B - Y=611974.0 N, X=479684.1 E</td> </tr> <tr> <td>C - Y=606641.7 N, X=479788.6 E</td> </tr> <tr> <td>D - Y=606649.7 N, X=478466.0 E</td> </tr> </table>	A - Y=611973.4 N, X=478369.1 E	B - Y=611974.0 N, X=479684.1 E	C - Y=606641.7 N, X=479788.6 E	D - Y=606649.7 N, X=478466.0 E		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: SEPTEMBER 9, 2014 Signature & Seal of Professional Surveyor: Certificate Number: 3239 Gary C. Eidson 12641 Ronald J. Eidson 3239 ACK _____ SWSC W.O.: 14.11.0920
A - Y=611973.4 N, X=478369.1 E						
B - Y=611974.0 N, X=479684.1 E						
C - Y=606641.7 N, X=479788.6 E						
D - Y=606649.7 N, X=478466.0 E						



DIRECTIONS TO BRADLEY 8 FEE #7H:

FROM THE INTERSECTION OF U.S. HWY. 285 AND CO. RD. 21 (ROCKIN R RED), GO WEST APPROX. 0.6 MILES ON CO. RD. 21. TURN RIGHT AND GO NORTH AT LEASE ROAD APPROX. 0.9 MILES. TURN RIGHT AND GO EAST APPROX. 0.3 MILES TO EXISTING #3H PAD. FROM THE NORTHEAST PAD CORNER FOLLOW STAKED ROAD 294 FEET EAST TO THIS LOCATION.



COG OPERATING, LLC

BRADLEY 8 FEE #7H WELL
LOCATED 165 FEET FROM THE SOUTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 19 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

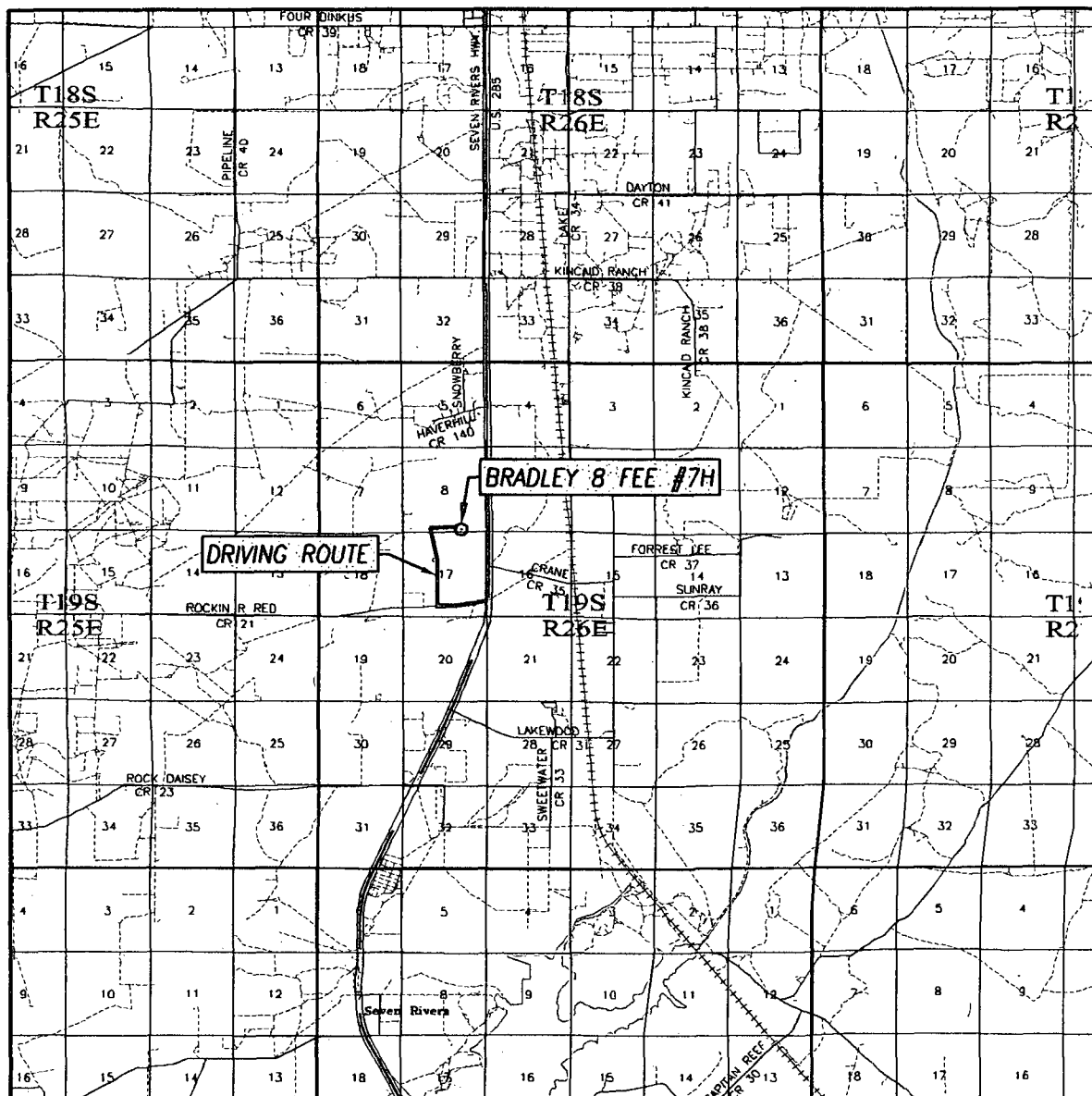


PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO HOBBS, N.M. 88240
 (575) 393-3117 www.jwsc.biz
 TBPLS# 10021000

Survey Date: 9/9/14	CAD Date: 9/23/14	Drawn By: ACK
W.O. No.: 14110920	Rev:	Rel. W.O.:

Sheet 1 of 1

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 19-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 165' FSL & 1650' FEL

ELEVATION 3373'

OPERATOR COG OPERATING, LLC

LEASE BRADLEY 8 FEE

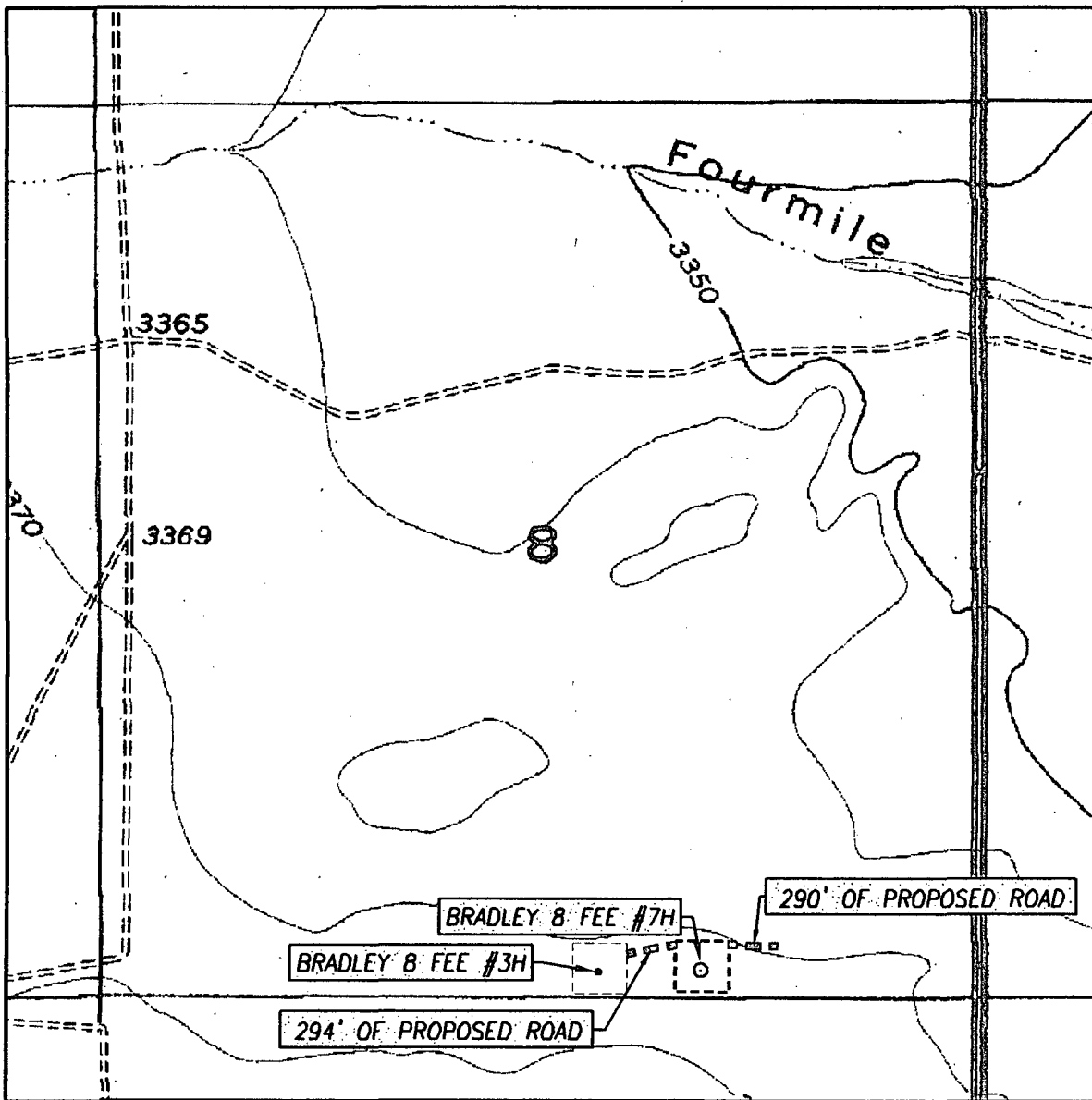


PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

LOCATION VERIFICATION MAP



SCALE: 1" = 1000'

CONTOUR INTERVAL:
DAYTON, N.M. - 10'

SEC. 8 TWP. 19-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 165' FSL & 1650' FEL

ELEVATION 3373'

OPERATOR COG OPERATING, LLC

LEASE BRADLEY 8 FEE

U.S.G.S. TOPOGRAPHIC MAP
DAYTON, N.M.

DIRECTIONS TO BRADLEY 8 FEE #7H:

FROM THE INTERSECTION OF U.S. HWY. 285 AND CO. RD. 21 (ROCKIN R RED), GO WEST APPROX. 0.6 MILES ON CO. RD. 21. TURN RIGHT AND GO NORTH AT LEASE ROAD APPROX. 0.9 MILES. TURN RIGHT AND GO EAST APPROX. 0.3 MILES TO EXISTING #3H PAD. FROM THE NORTHEAST PAD CORNER FOLLOW STAKED ROAD 294 FEET EAST TO THIS LOCATION.



PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240

(575) 393-3117 www.jwsc.biz

TBPLS# 10021000



COG Operating LLC

Eddy County, NM (NAD27 NME)

Bradley 8 Fee

#7H

WB1

Plan: Plan #1 10-20-14

Surface: 165' FSL, 1650' FEL, Sec 8, T19S, R26E, Unit O

PP: 330' FSL, 1650' FEL, Sec 8, T19S, R26E, Unit O

BHL: 330' FNL, 1650' FEL, Sec 8, T19S, R26E, Unit B.

Standard Planning Report

16 December, 2014





Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #7H
Company:	COGI Operating LLC	TVD Reference:	KB @ 3391.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD27/NME)	MD Reference:	KB @ 3391.00usft (Silver Oak 3)
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1,10-20-14		

Project	Eddy County, NM (NAD27/NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Bradley 8 Fee		
Site Position:		Northing:	606,797.50 usft
From:	Map	Easting:	478,847.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 40' 5.40482 N
		Longitude:	104° 24' 7.45386 W
		Grid Convergence:	-0.04 °

Well	#7H		
Well Position	+N-S	11.20 usft	Northing:
	+E-W	609.80 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 40' 5.51950 N
		Longitude:	104° 24' 0.32006 W
		Ground Level:	3,373.00 usft

Wellbore	WB1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010_14	12/16/2014	(°)
			7.57
			Dip Angle
			(°)
			60.37
			Field Strength
			(nT)
			48,442

Design	Plan #1,10-20-14		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			358.80

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N-S	+E-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(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	
2,543.11	0.00	0.00	2,543.11	0.00	0.00	0.00	0.00	0.00	0.00	
3,372.20	91.20	358.00	3,063.87	531.46	-18.56	11.00	11.00	0.00	358.00	
3,402.16	91.20	358.90	3,063.24	561.40	-19.37	3.00	0.00	3.00	89.99	
7,677.69	91.20	358.90	2,973.70	4,835.20	-101.50	0.00	0.00	0.00	0.00	PBHL-Bradley 8 #7H



Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #7H
Company:	COG Operating LLC	TVD Reference:	KB @ 3391.00usft (Silver Oak 3)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3391.00usft (Silver Oak 3)
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1 10-20-14		

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
2,543.11	0.00	0.00	2,543.11	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start 11°/100 Build									
2,600.00	6.26	358.00	2,599.89	3.10	-0.11	3.10	11.00	11.00	0.00
2,700.00	17.26	358.00	2,697.64	23.44	-0.82	23.45	11.00	11.00	0.00
2,800.00	28.26	358.00	2,789.71	62.04	-2.17	62.07	11.00	11.00	0.00
2,900.00	39.26	358.00	2,872.72	117.49	-4.10	117.55	11.00	11.00	0.00
2,969.67	46.92	358.00	2,923.57	165.02	-5.76	165.10	11.00	11.00	0.00
PP Bradley 8 #7H									
3,000.00	50.26	358.00	2,943.62	187.75	-6.56	187.84	11.00	11.00	0.00
3,100.00	61.26	358.00	2,999.81	270.24	-9.44	270.37	11.00	11.00	0.00
3,200.00	72.26	358.00	3,039.21	361.92	-12.64	362.11	11.00	11.00	0.00
3,300.00	83.26	358.00	3,060.38	459.44	-16.04	459.68	11.00	11.00	0.00
3,370.01	90.96	358.00	3,063.91	529.27	-18.48	529.54	11.00	11.00	0.00
TL 3075° TVD @ 0 VZ 91.2° Inc									
3,372.20	91.20	358.00	3,063.87	531.45	-18.56	531.73	11.00	11.00	0.00
LP Begin 3°/100 Turn									
3,400.00	91.20	358.83	3,063.28	559.24	-19.33	559.52	3.00	0.00	3.00
3,402.16	91.20	358.90	3,063.24	561.40	-19.37	561.68	3.00	0.00	3.00
Hold 91.2° Inc 358.9° Azm									
3,500.00	91.20	358.90	3,061.19	659.20	-21.25	659.50	0.00	0.00	0.00
3,600.00	91.20	358.90	3,059.10	759.16	-23.17	759.48	0.00	0.00	0.00
3,700.00	91.20	358.90	3,057.00	859.12	-25.09	859.45	0.00	0.00	0.00
3,800.00	91.20	358.90	3,054.91	959.08	-27.01	959.43	0.00	0.00	0.00
3,900.00	91.20	358.90	3,052.81	1,059.04	-28.93	1,059.41	0.00	0.00	0.00
4,000.00	91.20	358.90	3,050.72	1,158.99	-30.85	1,159.39	0.00	0.00	0.00
4,100.00	91.20	358.90	3,048.62	1,258.95	-32.77	1,259.37	0.00	0.00	0.00
4,200.00	91.20	358.90	3,046.53	1,358.91	-34.70	1,359.34	0.00	0.00	0.00
4,300.00	91.20	358.90	3,044.44	1,458.87	-36.62	1,459.32	0.00	0.00	0.00
4,400.00	91.20	358.90	3,042.34	1,558.83	-38.54	1,559.30	0.00	0.00	0.00
4,500.00	91.20	358.90	3,040.25	1,658.79	-40.46	1,659.28	0.00	0.00	0.00
4,600.00	91.20	358.90	3,038.15	1,758.75	-42.38	1,759.25	0.00	0.00	0.00
4,700.00	91.20	358.90	3,036.06	1,858.71	-44.30	1,859.23	0.00	0.00	0.00
4,800.00	91.20	358.90	3,033.97	1,958.67	-46.22	1,959.21	0.00	0.00	0.00
4,900.00	91.20	358.90	3,031.87	2,058.63	-48.14	2,059.19	0.00	0.00	0.00
5,000.00	91.20	358.90	3,029.78	2,158.59	-50.06	2,159.17	0.00	0.00	0.00
5,100.00	91.20	358.90	3,027.68	2,258.55	-51.98	2,259.14	0.00	0.00	0.00
5,200.00	91.20	358.90	3,025.59	2,358.51	-53.90	2,359.12	0.00	0.00	0.00
5,300.00	91.20	358.90	3,023.49	2,458.47	-55.83	2,459.10	0.00	0.00	0.00
5,400.00	91.20	358.90	3,021.40	2,558.43	-57.75	2,559.08	0.00	0.00	0.00
5,500.00	91.20	358.90	3,019.31	2,658.39	-59.67	2,659.06	0.00	0.00	0.00
5,600.00	91.20	358.90	3,017.21	2,758.35	-61.59	2,759.03	0.00	0.00	0.00
5,700.00	91.20	358.90	3,015.12	2,858.31	-63.51	2,859.01	0.00	0.00	0.00
5,800.00	91.20	358.90	3,013.02	2,958.27	-65.43	2,958.99	0.00	0.00	0.00
5,900.00	91.20	358.90	3,010.93	3,058.23	-67.35	3,058.97	0.00	0.00	0.00
6,000.00	91.20	358.90	3,008.83	3,158.19	-69.27	3,158.95	0.00	0.00	0.00
6,100.00	91.20	358.90	3,006.74	3,258.15	-71.19	3,258.92	0.00	0.00	0.00
6,200.00	91.20	358.90	3,004.65	3,358.11	-73.11	3,358.90	0.00	0.00	0.00
6,300.00	91.20	358.90	3,002.55	3,458.07	-75.04	3,458.88	0.00	0.00	0.00
6,400.00	91.20	358.90	3,000.46	3,558.03	-76.96	3,558.86	0.00	0.00	0.00
6,500.00	91.20	358.90	2,998.36	3,657.99	-78.88	3,658.83	0.00	0.00	0.00
6,600.00	91.20	358.90	2,996.27	3,757.94	-80.80	3,758.81	0.00	0.00	0.00
6,700.00	91.20	358.90	2,994.18	3,857.90	-82.72	3,858.79	0.00	0.00	0.00



Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #7H
Company:	COG Operating LLC	TVD Reference:	KB @ 3391.00usft (Silver Oak 3)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3391.00usft (Silver Oak 3)
Site:	Bradley 8 Fee	North Reference:	Grid
Well:	#7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #1, 10-20-14		

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)	
6,800.00	91.20	358.90	2,992.08	3,957.86	-84.64	3,958.77	0.00	0.00	0.00	
6,900.00	91.20	358.90	2,989.99	4,057.82	-86.56	4,058.75	0.00	0.00	0.00	
7,000.00	91.20	358.90	2,987.89	4,157.78	-88.48	4,158.72	0.00	0.00	0.00	
7,100.00	91.20	358.90	2,985.80	4,257.74	-90.40	4,258.70	0.00	0.00	0.00	
7,200.00	91.20	358.90	2,983.70	4,357.70	-92.32	4,358.68	0.00	0.00	0.00	
7,300.00	91.20	358.90	2,981.61	4,457.66	-94.24	4,458.66	0.00	0.00	0.00	
7,400.00	91.20	358.90	2,979.52	4,557.62	-96.17	4,558.64	0.00	0.00	0.00	
7,500.00	91.20	358.90	2,977.42	4,657.58	-98.09	4,658.61	0.00	0.00	0.00	
7,600.00	91.20	358.90	2,975.33	4,757.54	-100.01	4,758.59	0.00	0.00	0.00	
7,677.69	91.20	358.90	2,973.70	4,835.20	-101.50	4,836.26	0.00	0.00	0.00	
TD at 7677.69' MD - PBHL Bradley 8 #7H										

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PP-Bradley 8 #7H	- plan hits target center	0.00	0.00	2,923.55	165.00	-5.76	606,973.70	479,451.84	32° 40' 7.15225 N	104° 24' 0.38868 W
	- Point									
PBHL-Bradley 8 #7H	- plan hits target center	0.00	360.00	2,973.70	4,835.20	-101.50	611,643.90	479,356.10	32° 40' 53.36636 N	104° 24' 1.54324 W
	- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,370.01	3,063.91	TL, 3075' TVD @ 0 VZ, 91.2° Inc		-1.20	358.80	

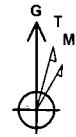
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,543.11	2,543.11	0.00	0.00	KOP, Start 11°/100' Build	
3,372.20	3,063.87	531.45	-18.56	LP, Begin 3°/100' Turn	
3,402.16	3,063.24	561.40	-19.37	Hold 91.2° Inc, 358.9° Azm	
7,677.69	2,973.70	4,835.20	-101.50	TD at 7677.69' MD	



Project: Eddy County, NM (NAD27 NME)
Site: Bradley 8 Fee
Well: #7H
Wellbore: WB1
Design: Plan #1 10-20-14
Rig: Silver Oak 3



PHOENIX
TECHNOLOGY SERVICES



Azimuths to Grid North
True North: 0.04°
Magnetic North: 7.61°
Magnetic Field
Strength: 48442.4nT
Dip Angle: 60.37°
Date: 12/16/2014
Model: IGRF2010_14

WELL DETAILS

+N-S	+E-W	Northing	Ground Level	Easting	Latitude	Longitude
0.00	0.00	606808.70	3373.00	479457.60	32° 40' 5.51950 N	104° 24' 0.32006 W

SECTION DETAILS

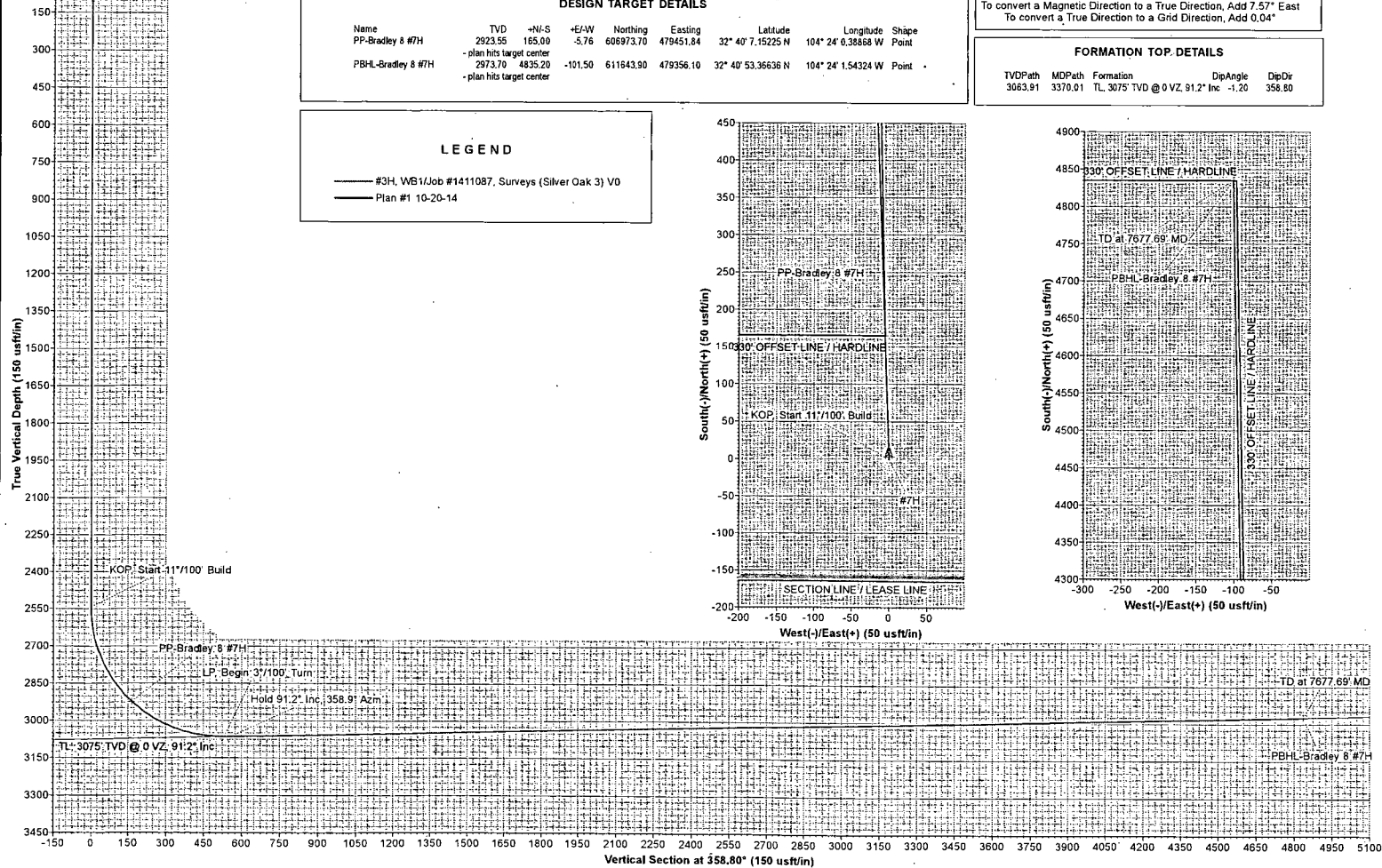
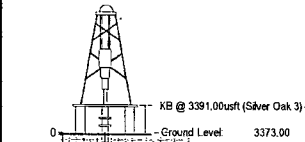
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	2543.11	0.00	0.00	2543.11	0.00	0.00	0.00	0.00	0.00		
3	3372.20	91.20	358.00	3063.87	531.46	-18.56	11.00	358.00	531.73		KOP Start 11°/100' Build
4	3402.16	91.20	358.90	3063.24	561.40	-19.37	3.00	89.99	561.68		LP Begin 3°/100' Turn
5	7677.69	91.20	358.90	2973.70	4835.20	-101.50	0.00	0.00	4836.27	PBHL-Bradley 8 #7H	TD at 7677.69' MD

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
PP-Bradley 8 #7H	2923.55	165.00	-5.76	606973.70	479451.84	32° 40' 7.15225 N	104° 24' 0.38868 W	Point
PBHL-Bradley 8 #7H	2973.70	4835.20	-101.50	611643.90	479356.10	32° 40' 53.36636 N	104° 24' 1.54324 W	Point

LEGEND

— #3H, WB1/Job #1411087, Surveys (Silver Oak 3) VO
— Plan #1 10-20-14



Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well #7H, Grid North

Latitude: 32° 40' 5.51950 N
Longitude: 104° 24' 0.32006 W

Grid East: 479457.60

Grid North: 606808.70

Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14

Sample Date: 16-Dec-14

Magnetic Declination: 7.57°

Dip Angle from Horizontal: 60.37°

Magnetic Field Strength: 48442

To convert a Magnetic Direction to a Grid Direction, Add 7.61°
To convert a Magnetic Direction to a True Direction, Add 7.57° East
To convert a True Direction to a Grid Direction, Add 0.04°

FORMATION TOP. DETAILS

TVDP	MDP	Formation	DipAngle	DipDir
3063.91	3370.01	TL 3075 TVD @ 0 VZ 91.2° Inc	-1.20	358.80

