

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-41723
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator COG Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator One Concho Center - 600 W Illinois Ave Midland, TX 79701		7. Lease Name or Unit Agreement Name Patton 5 Fee
4. Well Location Unit Letter E 1410 feet from the NORTH line and 230 feet from the WEST line Section 5 Township 19S Range 26E NMPM County EDDY		8. Well Number 3H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3380'		9. OGRID Number 229137
		10. Pool name or Wildcat Atoka; Glorieta Yeso 3250

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: **CHG BHL** ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions, Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC submitted APD for this well at this location:

SHL: 1410' FNL 230' FWL, Unit E

BHL: 1700' FNL 330' FEL, Unit H

COG Operating LLC respectfully requests permission to change the BHL:

SHL: 1410' FNL 230' FWL, Unit E

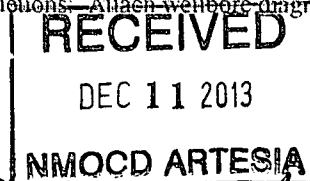
BHL: 1410' FNL 330' FEL, Unit H

Reason for changing the BHL is to avoid fracing into the Patton 5 Fee #4H wellbore.

A revised C-102 and directional plan are attached for your review.

Spud Date:

Rig Release Date:



Non Standard Location

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Permitting Tech DATE 12/11/13

Type or print name Kelly J. Holly E-mail address: kholly@concho.com PHONE: 432-685-4384

For State Use Only

APPROVED BY: [Signature] TITLE "Geologist" DATE 12-11-2013

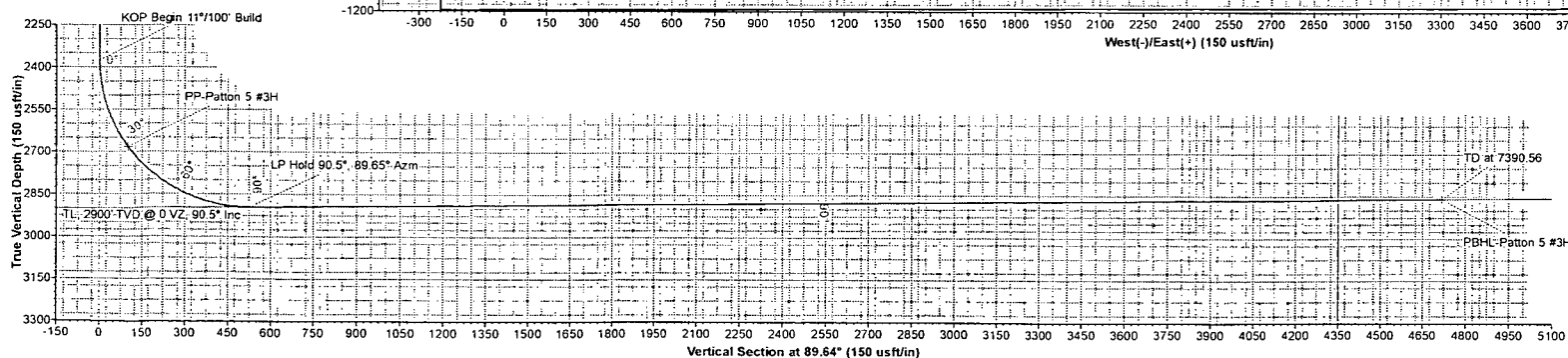
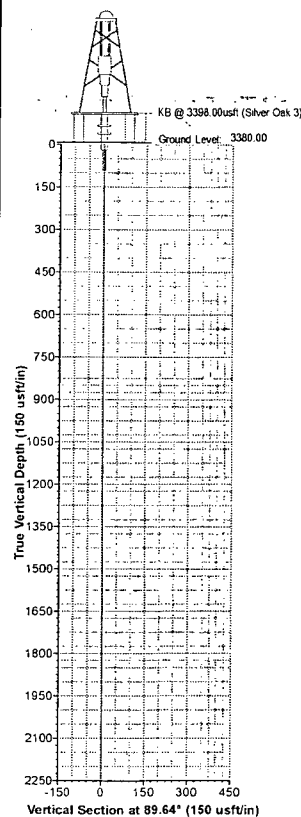
Conditions of Approval (if any):



Project: Eddy County, New Mexico (NAD 27 NME)
Site: Patton 5 Fee
Well: #3H
Wellbore: WB1/Job #1311670
Design: Plan #3 12-10-13
Rig: Silver Oak 3



Azimuths to Grid North
True North: 0.04°
Magnetic North: 7.74°
Magnetic Field
Strength: 48556.8nT
Dip Angle: 60.41°
Date: 12/10/2013
Model: IGRF2010_14



WELL DETAILS											
	+N/-S	+E/-W	Northing	Ground Level	3380.00	Latitude	Longitude				
	0.00	0.00	615791.80	475932.20		32° 41' 34.38927 N	104° 24' 41.64023 W				

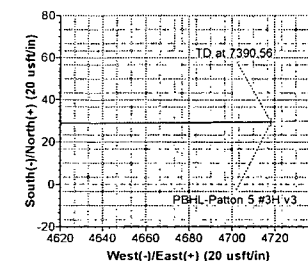
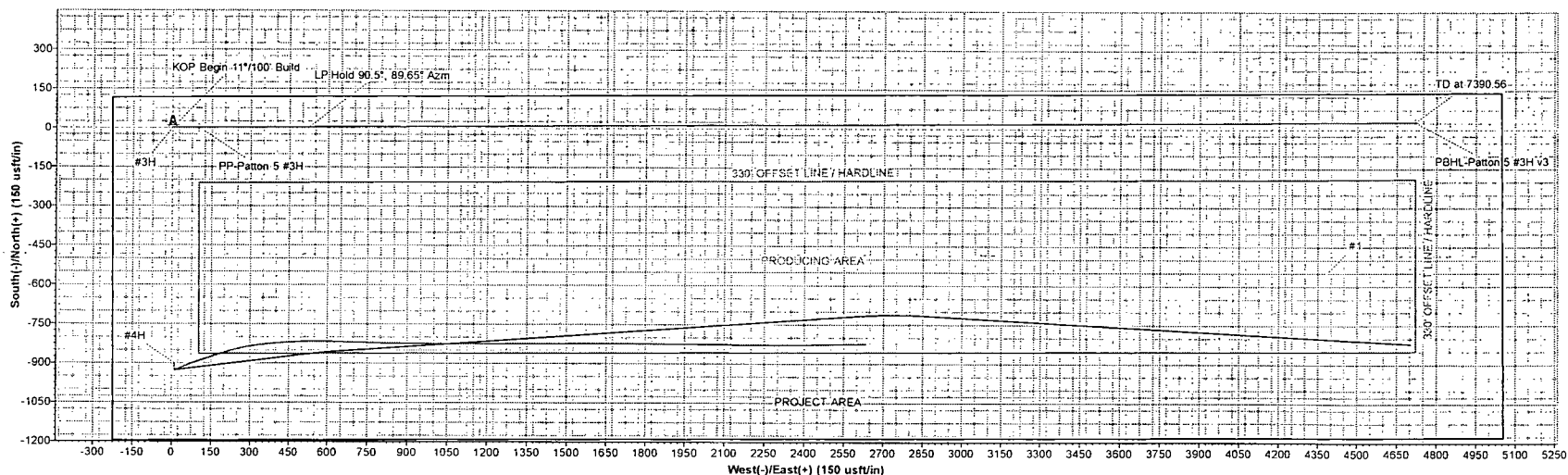
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	V Sect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	2374.70	0.00	0.00	2374.70	0.00	0.00	0.00	0.00	0.00		KOP Begin 11°/100' Build
3	3197.42	90.50	89.64	2895.55	3.28	525.43	11.00	89.64	525.41		LP Hold 90.5°, 89.65° Azm
4	7390.56	90.50	89.64	2895.00	29.50	4718.30	0.00	0.00	4718.39	PBHL-Patton 5 #3H v3	TD at 7390.56

DESIGN TARGET DETAILS											
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape			
PP-Patton 5 #3H	2682.95	0.63	101.00	615792.43	476033.20	32° 41' 34.38925 N	104° 24' 40.45834 W	Point			
				- plan hits target center							
PBHL-Patton 5 #3H v3	2859.00	29.50	4718.30	615821.30	480650.50	32° 41' 34.71225 N	104° 23' 46.42715 W	Point			
				- plan hits target center							

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 #3H, Grid North
Latitude: 32° 41' 34.38927 N
Longitude: 104° 24' 41.64023 W
Grid East: 475932.20
Grid North: 615791.80
Scale Factor: 1.000
Geomagnetic Model: IGRF2010_14
Sample Date: 10-Dec-13
Magnetic Declination: 7.70°
Dip Angle from Horizontal: 60.41°
Magnetic Field Strength: 48557
To convert a Magnetic Direction to a Grid Direction, Add 7.74°
To convert a Magnetic Direction to a True Direction, Add 7.70° East
To convert a True Direction to a Grid Direction, Add 0.04°

FORMATION TOP DETAILS					
TVDPath	MDPath	Formation	DpAngle	DpDir	
2895.52	3185.89	TL 2900' TVD @ 0 VZ 90.5° Inc	-0.50	93.16	

LEGEND	
—	#1, OH, Inc Surveys V0
—	#1H, OH / Job #1310304, Surveys (JW 4) V0
—	#4H, WB1, OH V0
—	Collision #1, OH, Inc Surveys V0
—	#4H, WB2/Re-Entry, Plan #4 07-10-13 V0
—	Plan #3 12-10-13



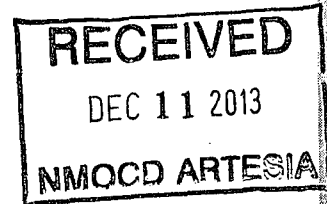
COG Operating LLC

Eddy County, New Mexico (NAD 27 NME)

Patton 5 Fee

#3H

WB1/Job #1311670



Plan: Plan #3 12-10-13

Surface: 1410' FNL, 230' FWL, Sec 5, T19S, R26E, Unit E

PP: 1410' FNL, 330' FWL, Sec 5, T19S, R26E, Unit E

BHL: 1410' FNL, 330' FEL, Sec 5, T19S, R26E, Unit H

Standard Planning Report

10 December, 2013

Phoenix Technology Services

Planning Report

Database:	GCR DB	Local Co-ordinate Reference:	Well #3H
Company:	COG Operating LLC	TVD Reference:	KB @ 3398.00usft (Silver Oak 3)
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	KB @ 3398.00usft (Silver Oak 3)
Site:	Patton 5 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1311670		
Design:	Plan #3 12-10-13		

Project	Eddy County, New Mexico (NAD 27 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	Patton 5 Fee		
Site Position:	Northings:	613,610.70 usft	Latitude: 32° 41' 12.80582 N
From: Map	Easting:	475,920.20 usft	Longitude: 104° 24' 41.76182 W
Position Uncertainty:	0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: -0.04 °

Well:	#3H		
Well Position	+N/-S	2,181.10 usft	Northings: 615,791.80 usft
	+E/-W	12.00 usft	Easting: 475,932.20 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level: 3,380.00 usft

Wellbore	WB1/Job #1311670		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010_14	12/10/13	7.70
			Dip Angle
			60.41
			Field Strength
			48,557

Design	Plan #3 12-10-13		
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
			89.64

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,374.70	0.00	0.00	2,374.70	0.00	0.00	0.00	0.00	0.00	0.00	
3,197.42	90.50	89.64	2,895.55	3.28	525.40	11.00	11.00	10.90	89.64	
7,390.56	90.50	89.64	2,859.00	29.50	4,718.30	0.00	0.00	0.00	0.00	PBHL-Patton 5 #3H v

Phoenix Technology Services

Planning Report

Database:	GCR DB	Local Co-ordinate Reference:	Well #3H
Company:	COG Operating LLC	TVD Reference:	KB @ 3398.00usft (Silver Oak 3)
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	KB @ 3398.00usft (Silver Oak 3)
Site:	Patton 5 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1311670		
Design:	Plan #3 12-10-13		

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	
2,374.70	0.00	0.00	2,374.70	0.00	0.00	0.00	0.00	0.00	0.00	
KOP Begin 11°/100' Build										
2,400.00	2.78	89.64	2,399.99	0.00	0.61	0.61	11.00	11.00	0.00	
2,500.00	13.78	89.64	2,498.80	0.09	15.00	15.00	11.00	11.00	0.00	
2,600.00	24.78	89.64	2,593.04	0.30	47.97	47.97	11.00	11.00	0.00	
2,700.00	35.78	89.64	2,679.26	0.61	98.32	98.32	11.00	11.00	0.00	
2,704.55	36.28	89.64	2,682.94	0.63	100.99	100.99	11.00	11.00	0.00	
PP-Patton 5 #3H										
2,800.00	46.78	89.64	2,754.29	1.03	164.19	164.20	11.00	11.00	0.00	
2,900.00	57.78	89.64	2,815.37	1.52	243.18	243.18	11.00	11.00	0.00	
3,000.00	68.78	89.64	2,860.26	2.08	332.36	332.37	11.00	11.00	0.00	
3,100.00	79.78	89.64	2,887.31	2.68	428.47	428.48	11.00	11.00	0.00	
3,185.89	89.23	89.64	2,895.52	3.21	513.87	513.88	11.00	11.00	0.00	
TL, 2900' TVD @ 0° VZ, 90.5° Inc										
3,197.42	90.50	89.64	2,895.55	3.28	525.40	525.41	11.00	11.00	0.00	
LP Hold 90.5°, 89.65° Azm										
3,200.00	90.50	89.64	2,895.53	3.30	527.98	527.99	0.01	0.01	0.00	
3,300.00	90.50	89.64	2,894.66	3.93	627.97	627.98	0.00	0.00	0.00	
3,400.00	90.50	89.64	2,893.79	4.55	727.97	727.98	0.00	0.00	0.00	
3,500.00	90.50	89.64	2,892.91	5.18	827.96	827.98	0.00	0.00	0.00	
3,600.00	90.50	89.64	2,892.04	5.80	927.96	927.97	0.00	0.00	0.00	
3,700.00	90.50	89.64	2,891.17	6.43	1,027.95	1,027.97	0.00	0.00	0.00	
3,800.00	90.50	89.64	2,890.30	7.05	1,127.94	1,127.97	0.00	0.00	0.00	
3,900.00	90.50	89.64	2,889.43	7.68	1,227.94	1,227.96	0.00	0.00	0.00	
4,000.00	90.50	89.64	2,888.56	8.30	1,327.93	1,327.96	0.00	0.00	0.00	
4,100.00	90.50	89.64	2,887.68	8.93	1,427.93	1,427.95	0.00	0.00	0.00	
4,200.00	90.50	89.64	2,886.81	9.55	1,527.92	1,527.95	0.00	0.00	0.00	
4,300.00	90.50	89.64	2,885.94	10.18	1,627.92	1,627.95	0.00	0.00	0.00	
4,400.00	90.50	89.64	2,885.07	10.80	1,727.91	1,727.94	0.00	0.00	0.00	
4,500.00	90.50	89.64	2,884.20	11.43	1,827.90	1,827.94	0.00	0.00	0.00	
4,600.00	90.50	89.64	2,883.32	12.05	1,927.90	1,927.94	0.00	0.00	0.00	
4,700.00	90.50	89.64	2,882.45	12.68	2,027.89	2,027.93	0.00	0.00	0.00	
4,800.00	90.50	89.64	2,881.58	13.30	2,127.89	2,127.93	0.00	0.00	0.00	
4,900.00	90.50	89.64	2,880.71	13.93	2,227.88	2,227.92	0.00	0.00	0.00	
5,000.00	90.50	89.64	2,879.84	14.55	2,327.87	2,327.92	0.00	0.00	0.00	
5,100.00	90.50	89.64	2,878.97	15.18	2,427.87	2,427.92	0.00	0.00	0.00	
5,200.00	90.50	89.64	2,878.09	15.80	2,527.86	2,527.91	0.00	0.00	0.00	
5,300.00	90.50	89.64	2,877.22	16.43	2,627.86	2,627.91	0.00	0.00	0.00	
5,400.00	90.50	89.64	2,876.35	17.06	2,727.85	2,727.91	0.00	0.00	0.00	
5,500.00	90.50	89.64	2,875.48	17.68	2,827.85	2,827.90	0.00	0.00	0.00	
5,600.00	90.50	89.64	2,874.61	18.31	2,927.84	2,927.90	0.00	0.00	0.00	
5,700.00	90.50	89.64	2,873.74	18.93	3,027.83	3,027.89	0.00	0.00	0.00	
5,800.00	90.50	89.64	2,872.86	19.56	3,127.83	3,127.89	0.00	0.00	0.00	
5,900.00	90.50	89.64	2,871.99	20.18	3,227.82	3,227.89	0.00	0.00	0.00	
6,000.00	90.50	89.64	2,871.12	20.81	3,327.82	3,327.88	0.00	0.00	0.00	
6,100.00	90.50	89.64	2,870.25	21.43	3,427.81	3,427.88	0.00	0.00	0.00	
6,200.00	90.50	89.64	2,869.38	22.06	3,527.81	3,527.87	0.00	0.00	0.00	
6,300.00	90.50	89.64	2,868.51	22.68	3,627.80	3,627.87	0.00	0.00	0.00	
6,400.00	90.50	89.64	2,867.63	23.31	3,727.79	3,727.87	0.00	0.00	0.00	
6,500.00	90.50	89.64	2,866.76	23.93	3,827.79	3,827.86	0.00	0.00	0.00	
6,600.00	90.50	89.64	2,865.89	24.56	3,927.78	3,927.86	0.00	0.00	0.00	
6,700.00	90.50	89.64	2,865.02	25.18	4,027.78	4,027.86	0.00	0.00	0.00	
6,800.00	90.50	89.64	2,864.15	25.81	4,127.77	4,127.85	0.00	0.00	0.00	

Phoenix Technology Services

Planning Report

Database:	GCR DB	Local Co-ordinate Reference:	Well #3H
Company:	COG Operating LLC	TVD Reference:	KB @ 3398.00usft (Silver Oak 3)
Project:	Eddy County, New Mexico (NAD 27 NME)	MD Reference:	KB @ 3398.00usft (Silver Oak 3)
Site:	Patton 5 Fee	North Reference:	Grid
Well:	#3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1311670		
Design:	Plan #3 12-10-13		

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)
6,900.00	90.50	89.64	2,863.28	26.43	4,227.77	4,227.85	0.00	0.00	0.00
7,000.00	90.50	89.64	2,862.40	27.06	4,327.76	4,327.84	0.00	0.00	0.00
7,100.00	90.50	89.64	2,861.53	27.68	4,427.75	4,427.84	0.00	0.00	0.00
7,200.00	90.50	89.64	2,860.66	28.31	4,527.75	4,527.84	0.00	0.00	0.00
7,300.00	90.50	89.64	2,859.79	28.93	4,627.74	4,627.83	0.00	0.00	0.00
7,370.16	90.50	89.64	2,859.18	29.37	4,697.90	4,697.99	0.00	0.00	0.00
PBHL-Patton 5 #3H									
7,390.56	90.50	89.64	2,859.00	29.50	4,718.30	4,718.39	0.00	0.00	0.00
TD at 7390.56 - PBHL-Patton 5 #3H v3									

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									
PP-Patton 5 #3H	0.00	360.00	2,682.95	0.63	101.00	615,792.44	476,033.20	32° 41' 34.39625 N	104° 24' 40.45834 W
- plan hits target center									
- Point									
PBHL-Patton 5 #3H v3	0.00	360.00	2,859.00	29.50	4,718.30	615,821.30	480,650.50	32° 41' 34.71225 N	104° 23' 46.42715 W
- plan hits target center									
- Point									

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,185.89	2,895.52	TL, 2900' TVD @ 0 VZ, 90.5° Inc		-0.50	93.16

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,374.70	2,374.70	0.00	0.00	KOP Begin 11°/100' Build
3,197.42	2,895.55	3.28	525.40	LP Hold 90.5°, 89.65° Azm
7,390.56	2,859.00	29.50	4,718.30	TD at 7390.56