

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

OCT 17 2007

OCD-ARTESIA AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-35863	Pool Code	Pool Name WILDCAT; WOLF CAMP
Property Code 36785	Property Name RAVEN "12" STATE	Well Number 1H
OGRID No. 229137	Operator Name C.O.G. OPERATING L.L.C.	Elevation 3587'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	16 S	28 E		430	SOUTH	330	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
M	12	16 S	28 E		430	SOUTH	330	WEST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
-------------------------------	-----------------	--------------------	-----------

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

BOTTOM HOLE LOCATION LAT.: N 32°55'55.33" LONG.: W104°08'14.03" N.: 702865.143 SPC- E.: 601504.365 (NAD-83)		SURFACE LOCATION LAT.: N 32°55'54.26" LONG.: W104°07'20.44" N.: 702766.154 SPC- E.: 606071.630 (NAD-83)	
OPERATOR CERTIFICATION <i>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 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.</i> Signature Date PHYLLIS A. EDWARDS Printed Name REGULATORY ANALYST		SURVEYOR CERTIFICATION <i>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.</i> OCTOBER 05, 2007 Date Surveyed Signature Professional Surveyor W. Surveyor No. 7977 Certificate No. Gary L. Jones 7977 BASIN SURVEYS	

Planned Wellpath Report

Plan #1
Page 1 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Concho O&G	Slot	#1H_SHL
Area	Eddy County, NM	Well	#1H
Field	(Raven) Section 12 T16S R28E	Wellbore	#1H_PWB
Facility	Raven 12 State		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect™ 1.2
North Reference	Grid	User	Victor Hernandez
Scale	0.999914	Report Generated	10/16/07 at 10:28:05
Wellbore last revised	10/12/07	Database/Source file	WA_Midland/#1H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	606071.63	702766.15	32 55 54.259N	104 07 20.439W
Facility Reference Pt			606071.63	702766.15	32 55 54.259N	104 07 20.439W
Field Reference Pt			606071.63	702766.15	32 55 54.259N	104 07 20.439W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on #1H_SHL (RT) to Facility Vertical Datum	0.00 feet
Horizontal Reference Pt	Facility Center	Rig on #1H_SHL (RT) to GRN. ELEV.	3587.00 feet
Vertical Reference Pt	Rig on #1H_SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Rig on #1H_SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	GRN. ELEV.	Section Azimuth	271.24°

Planned Wellpath Report

Plan #1
Page 2 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Concho O&G	Slot	#1H_SHL
Area	Eddy County, NM	Well	#1H
Field	(Raven) Section 12 T16S R28E	Wellbore	#1H PWB
Facility	Raven 12 State		

WELLPATH DATA (59 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
0.00	0.000	271.242	0.00	0.00	0.00	0.00	0.00	Tie On	
330.00†	0.000	0.000	330.00	0.00	0.00	0.00	0.00		T/SALT
400.00†	0.000	0.000	400.00	0.00	0.00	0.00	0.00		YATES
1150.00†	0.000	0.000	1150.00	0.00	0.00	0.00	0.00		QUEEN
1870.00†	0.000	0.000	1870.00	0.00	0.00	0.00	0.00		SAN ANDRES
3300.00†	0.000	0.000	3300.00	0.00	0.00	0.00	0.00		GLORIETA
5350.00†	0.000	0.000	5350.00	0.00	0.00	0.00	0.00		ABO / SHALE
6200.00	0.000	271.242	6200.00	0.00	0.00	0.00	0.00	KOP	
6300.00†	11.693	271.242	6299.31	10.17	0.22	-10.17	11.69		
6400.00†	23.386	271.242	6394.49	40.25	0.87	-40.24	11.69		
6500.00†	35.079	271.242	6481.61	89.00	1.93	-88.98	11.69		
6600.00†	46.772	271.242	6557.03	154.40	3.35	-154.36	11.69		
6700.00†	58.465	271.242	6617.64	233.72	5.06	-233.67	11.69		WOLFCAMP
6770.00†	66.650	271.242	6649.87	295.79	6.41	-295.72	11.69		WOLFCAMP PAY
6800.00†	70.158	271.242	6660.91	323.68	7.01	-323.61	11.69		
6900.00†	81.851	271.242	6685.05	420.54	9.11	-420.45	11.69		
6969.69	90.000	271.242	6690.00	490.00	10.62	-489.88	11.69	EOC	
7000.00†	90.000	271.242	6690.00	520.31	11.27	-520.19	0.00		
7100.00†	90.000	271.242	6690.00	620.31	13.44	-620.16	0.00		
7200.00†	90.000	271.242	6690.00	720.31	15.61	-720.14	0.00		
7300.00†	90.000	271.242	6690.00	820.31	17.78	-820.12	0.00		
7400.00†	90.000	271.242	6690.00	920.31	19.94	-920.09	0.00		
7500.00†	90.000	271.242	6690.00	1020.31	22.11	-1020.07	0.00		
7600.00†	90.000	271.242	6690.00	1120.31	24.28	-1120.05	0.00		
7700.00†	90.000	271.242	6690.00	1220.31	26.44	-1220.02	0.00		
7800.00†	90.000	271.242	6690.00	1320.31	28.61	-1320.00	0.00		
7900.00†	90.000	271.242	6690.00	1420.31	30.78	-1419.98	0.00		
8000.00†	90.000	271.242	6690.00	1520.31	32.94	-1519.95	0.00		
8100.00†	90.000	271.242	6690.00	1620.31	35.11	-1619.93	0.00		
8200.00†	90.000	271.242	6690.00	1720.31	37.28	-1719.91	0.00		
8300.00†	90.000	271.242	6690.00	1820.31	39.44	-1819.88	0.00		
8400.00†	90.000	271.242	6690.00	1920.31	41.61	-1919.86	0.00		
8500.00†	90.000	271.242	6690.00	2020.31	43.78	-2019.84	0.00		
8600.00†	90.000	271.242	6690.00	2120.31	45.95	-2119.81	0.00		
8700.00†	90.000	271.242	6690.00	2220.31	48.11	-2219.79	0.00		
8800.00†	90.000	271.242	6690.00	2320.31	50.28	-2319.76	0.00		
8900.00†	90.000	271.242	6690.00	2420.31	52.45	-2419.74	0.00		
9000.00†	90.000	271.242	6690.00	2520.31	54.61	-2519.72	0.00		
9100.00†	90.000	271.242	6690.00	2620.31	56.78	-2619.69	0.00		
9200.00†	90.000	271.242	6690.00	2720.31	58.95	-2719.67	0.00		

Planned Wellpath Report

Plan #1
Page 3 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Concho O&G	Slot	#1H_SHL
Area	Eddy County, NM	Well	#1H
Field	(Raven) Section 12 T16S R28E	Wellbore	#1H PWB
Facility	Raven 12 State		

WELLPATH DATA (59 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
9300.00†	90.000	271.242	6690.00	2820.31	61.11	-2819.65	0.00		
9400.00†	90.000	271.242	6690.00	2920.31	63.28	-2919.62	0.00		
9500.00†	90.000	271.242	6690.00	3020.31	65.45	-3019.60	0.00		
9600.00†	90.000	271.242	6690.00	3120.31	67.62	-3119.58	0.00		
9700.00†	90.000	271.242	6690.00	3220.31	69.78	-3219.55	0.00		
9800.00†	90.000	271.242	6690.00	3320.31	71.95	-3319.53	0.00		
9900.00†	90.000	271.242	6690.00	3420.31	74.12	-3419.51	0.00		
10000.00†	90.000	271.242	6690.00	3520.31	76.28	-3519.48	0.00		
10100.00†	90.000	271.242	6690.00	3620.31	78.45	-3619.46	0.00		
10200.00†	90.000	271.242	6690.00	3720.31	80.62	-3719.44	0.00		
10300.00†	90.000	271.242	6690.00	3820.31	82.78	-3819.41	0.00		
10400.00†	90.000	271.242	6690.00	3920.31	84.95	-3919.39	0.00		
10500.00†	90.000	271.242	6690.00	4020.31	87.12	-4019.37	0.00		
10600.00†	90.000	271.242	6690.00	4120.31	89.28	-4119.34	0.00		
10700.00†	90.000	271.242	6690.00	4220.31	91.45	-4219.32	0.00		
10800.00†	90.000	271.242	6690.00	4320.31	93.62	-4319.30	0.00		
10900.00†	90.000	271.242	6690.00	4420.31	95.79	-4419.27	0.00		
11000.00†	90.000	271.242	6690.00	4520.31	97.95	-4519.25	0.00		
11048.43	90.000	271.242	6690.00 ¹	4568.74	99.00	-4567.67	0.00	#1H BHL	

HOLE & CASING SECTIONS Ref Wellbore: #1H PWB Ref Wellpath: Plan #1

String/Diameter	Start MD [feet]	End MD [feet]	Interval [feet]	Start TVD [feet]	End TVD [feet]	Start N/S [feet]	Start E/W [feet]	End N/S [feet]	End E/W [feet]
8.75in Open Hole	6200.00	6969.69	769.69	6200.00	6690.00	0.00	0.00	10.62	-489.88
7.875in Open Hole	6969.69	11048.43	4078.74	6690.00	6690.00	10.62	-489.88	99.00	-4567.67

TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
1) #1H BHL	11048.43	6690.00	99.00	-4567.67	601504.36	702865.14	32 55 55.326N	104 08 14.027W	point

Concho O&G

Location Eddy County, NM
Field (Raven) Section 12 T16S R28E
Facility Raven 12 State

Slot #1H_SHL
Well #1H
Wellbore #1H_PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	271.242	0.00	0.00	0.00	0.00	0.00
KOP	6200.00	0.000	271.242	6200.00	0.00	0.00	0.00	0.00
EOC	6969.69	90.000	271.242	6690.00	10.62	-489.88	11.69	490.00
#1H_BHL	11048.43	90.000	271.242	6690.00	99.00	-4567.67	0.00	4568.74

Plot reference wellpath is Plan #1

True vertical depths are referenced to Rig on #1H_SHL (RT)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on #1H_SHL (RT)	North Reference Grid north
Rig on #1H_SHL (RT) to GRN ELEV 3587 feet	Scale True distance
GRN ELEV to Mud line (Facility - Raven 12 State) -3587 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by hornwic on 10/16/2007

