



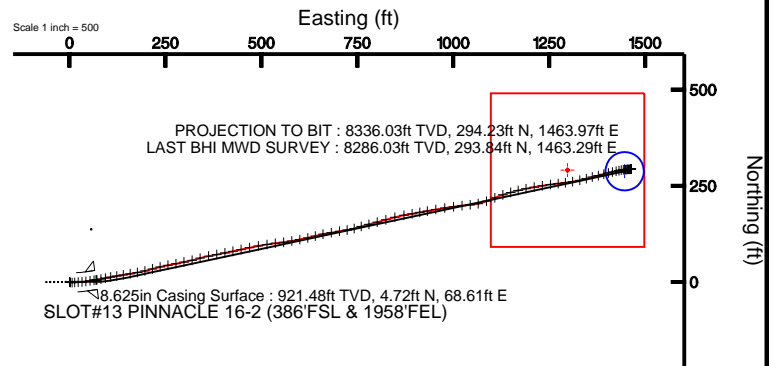
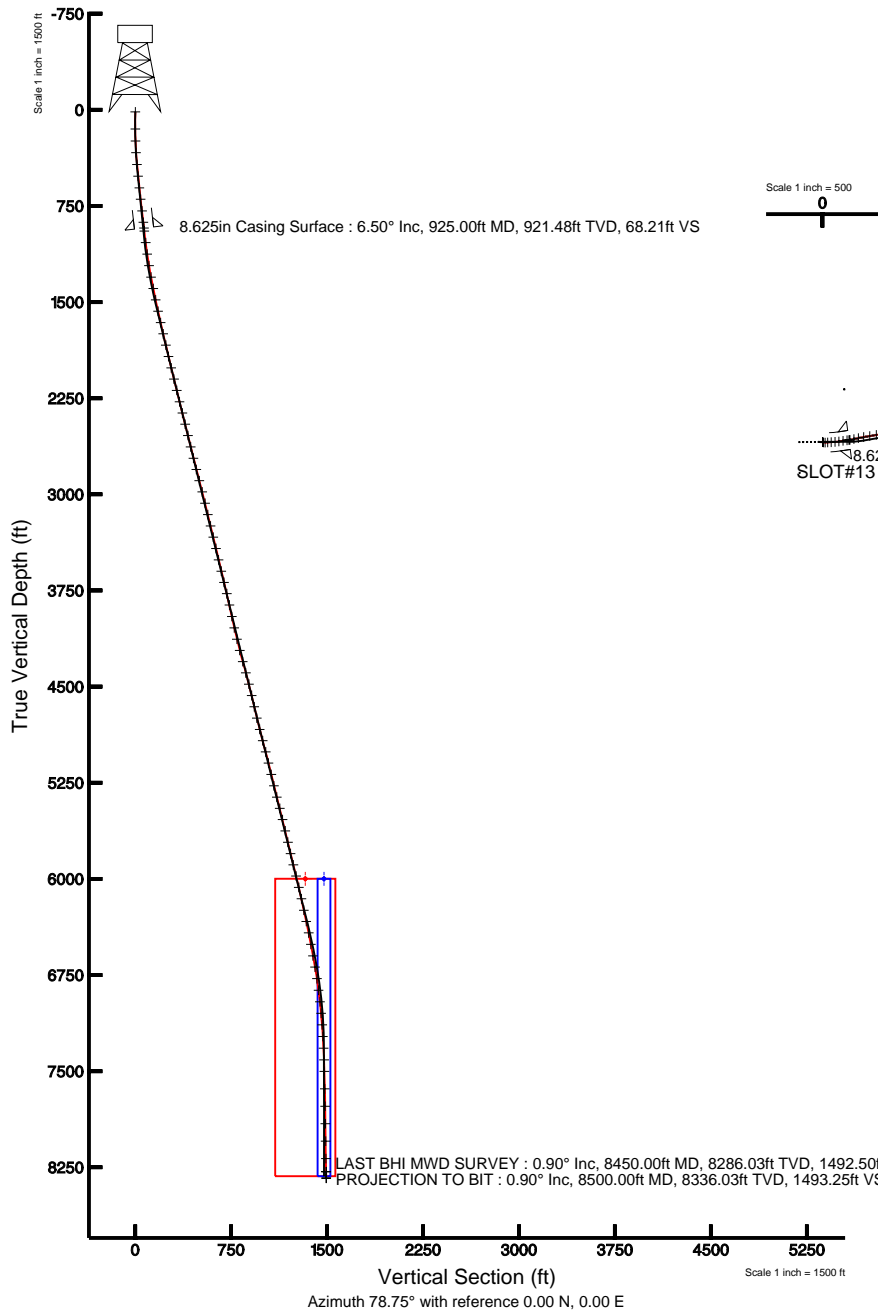
# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#13 PINNACLE 16-2 (386°FSL & 1958°FEL)  
Field: WELD COUNTY (KERR MCGEE) Well: PINNACLE 16-2  
Facility: SEC.02-T1N-R68W Wellbore: PINNACLE 16-2 PWB



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Plot reference wellpath is PINNACLE 16-2 (REV-A.0) PWP	
True vertical depths are referenced to XTREME 12 (RKB)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (S01), US feet
Measured depths are referenced to XTREME 12 (RKB)	North Reference: True north
XTREME 12 (RKB) to Mean Sea Level: 5020 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.02-T1N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdarn on 6/8/2011



BGGM (1945.0 to 2012.0) Dip: 66.77° Field: 52979 nT  
Magnetic North is 8.94 degrees East of True North (at 3/25/2011)

To correct azimuth from Magnetic to True add 8.94 degrees



# Actual Wellpath Report

PINNACLE 16-2 awp

Page 1 of 5



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 PINNACLE 16-2 (386'FSL & 1958'FEL)
Area	COLORADO	Well	PINNACLE 16-2
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PINNACLE 16-2 awb
Facility	SEC.02-T1N-R68W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Cookdanm
Scale	0.999962	Report Generated	6/8/2011 at 10:39:13 AM
Convergence at slot	0.34° East	Database/Source file	WA_DENVER/PINNACLE_16-2_awb.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-871.33	1664.89	3148842.63	1270310.78	40°04'27.005"N	104°58'05.264"W
Facility Reference Pt			3147172.67	1271172.18	40°04'35.616"N	104°58'26.681"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 12 (RKB) to Facility Vertical Datum	5020.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RKB) to Mean Sea Level	5020.00ft
Vertical Reference Pt	XTREME 12 (RKB)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 12 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	78.75°



# Actual Wellpath Report

PINNACLE 16-2 awp

Page 2 of 5



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	PINNACLE 16-2
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PINNACLE 16-2 awb
Facility	SEC.02-T1N-R68W		

## WELLPATH DATA (93 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	147.500	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	147.500	15.00	0.00	0.00	0.00	0.00	
149.00	0.700	147.500	149.00	0.30	-0.69	0.44	0.52	
242.00	1.800	109.200	241.97	1.76	-1.65	2.12	1.42	
334.00	3.700	88.800	333.87	5.93	-2.06	6.46	2.29	
426.00	5.100	84.900	425.59	12.92	-1.64	13.50	1.56	
518.00	6.200	86.000	517.14	21.91	-0.93	22.53	1.20	
609.00	6.400	85.300	607.60	31.83	-0.17	32.48	0.24	
699.00	6.700	83.200	697.01	42.04	0.86	42.70	0.43	
791.00	6.800	79.300	788.37	52.84	2.51	53.38	0.51	
880.00	6.500	83.200	876.77	63.13	4.09	63.56	0.61	
949.00	6.500	82.100	945.33	70.93	5.08	71.30	0.18	
1040.00	6.900	76.100	1035.71	81.53	7.11	81.71	0.89	
1130.00	8.100	78.600	1124.94	93.27	9.66	93.18	1.38	
1221.00	9.800	79.300	1214.83	107.43	12.36	107.07	1.87	
1312.00	10.600	81.400	1304.39	123.53	15.05	122.96	0.97	
1403.00	11.400	79.600	1393.71	140.88	17.93	140.08	0.96	
1493.00	12.100	80.700	1481.83	159.21	21.06	158.14	0.82	
1584.00	12.100	80.300	1570.81	178.27	24.21	176.95	0.09	
1675.00	12.900	75.800	1659.65	197.95	28.30	196.20	1.38	
1765.00	13.500	74.700	1747.27	218.46	33.54	216.07	0.72	
1856.00	12.700	75.800	1835.90	239.05	38.80	236.01	0.92	
1947.00	13.700	80.000	1924.50	259.81	43.12	256.33	1.52	
2038.00	13.400	78.600	2012.97	281.13	47.08	277.27	0.49	
2128.00	14.200	77.900	2100.37	302.60	51.45	298.29	0.91	
2219.00	13.300	77.200	2188.76	324.22	56.11	319.41	1.01	
2310.00	14.200	73.300	2277.15	345.80	61.64	340.31	1.42	
2401.00	14.700	79.600	2365.28	368.45	66.93	362.36	1.81	
2491.00	13.300	78.200	2452.60	390.23	71.11	383.73	1.60	
2582.00	13.900	79.600	2541.05	411.62	75.22	404.72	0.75	
2673.00	13.400	78.200	2629.48	433.10	79.35	425.80	0.66	
2764.00	14.300	77.200	2717.84	454.87	84.00	447.08	1.02	
2855.00	14.600	77.500	2805.96	477.57	88.97	469.23	0.34	
2945.00	15.100	80.700	2892.95	500.63	93.32	491.88	1.07	
3036.00	14.200	79.600	2980.99	523.64	97.25	514.55	1.04	
3127.00	13.800	84.200	3069.29	545.60	100.36	536.33	1.30	
3218.00	13.800	82.100	3157.67	567.24	102.95	557.88	0.55	
3309.00	13.500	79.600	3246.10	588.70	106.36	579.08	0.73	
3399.00	14.000	80.000	3333.52	610.09	110.15	600.13	0.57	
3490.00	12.900	77.200	3422.02	631.25	114.31	620.88	1.40	
3581.00	12.600	74.000	3510.78	651.29	119.30	640.32	0.84	
3672.00	14.000	79.600	3599.34	672.19	124.02	660.69	2.09	
3762.00	14.000	79.600	3686.67	693.96	127.95	682.11	0.00	
3853.00	13.600	81.000	3775.04	715.66	131.61	703.50	0.57	
3944.00	12.200	80.300	3863.74	735.96	134.91	723.55	1.55	



# Actual Wellpath Report

PINNACLE 16-2 awp

Page 3 of 5



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 PINNACLE 16-2 (386'FSL & 1958'FEL)
Area	COLORADO	Well	PINNACLE 16-2
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PINNACLE 16-2 awb
Facility	SEC.02-T1N-R68W		

## WELLPATH DATA (93 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4035.00	11.700	76.100	3952.77	754.79	138.74	741.98	1.10	
4126.00	12.700	71.400	4041.72	773.93	144.15	760.42	1.55	
4217.00	13.600	77.200	4130.33	794.55	149.71	780.34	1.75	
4307.00	15.000	74.000	4217.54	816.73	155.27	801.85	1.79	
4398.00	14.800	75.100	4305.48	840.07	161.50	824.40	0.38	
4489.00	16.300	74.000	4393.15	864.40	168.01	847.91	1.68	
4580.00	14.500	81.400	4480.89	888.51	173.23	871.46	2.92	
4671.00	13.400	77.500	4569.20	910.43	177.22	893.02	1.59	
4761.00	12.300	81.700	4656.95	930.43	180.86	912.68	1.60	
4852.00	13.200	80.000	4745.71	950.50	184.06	932.51	1.07	
4943.00	15.300	77.900	4833.90	972.89	188.39	954.48	2.38	
5034.00	15.000	83.800	4921.74	996.63	192.17	977.93	1.73	
5125.00	14.500	80.300	5009.75	1019.75	195.37	1000.87	1.12	
5215.00	14.000	84.200	5096.98	1041.85	198.36	1022.81	1.20	
5306.00	13.500	85.100	5185.37	1063.37	200.38	1044.34	0.60	
5397.00	13.300	77.900	5273.90	1084.39	203.49	1065.16	1.85	
5488.00	15.400	69.400	5362.07	1106.78	209.93	1086.71	3.26	
5579.00	14.400	66.600	5450.01	1129.77	218.68	1108.40	1.35	
5669.00	14.200	71.900	5537.22	1151.67	226.55	1129.17	1.47	
5760.00	13.100	75.100	5625.65	1173.04	232.67	1149.74	1.47	
5851.00	12.900	75.400	5714.32	1193.48	237.88	1169.54	0.23	
5942.00	13.600	79.300	5802.90	1214.32	242.43	1189.88	1.25	
6033.00	13.800	79.300	5891.31	1235.87	246.43	1211.06	0.22	
6123.00	13.900	81.400	5978.69	1257.40	250.04	1232.30	0.57	
6214.00	13.300	81.000	6067.14	1278.78	253.31	1253.44	0.67	
6305.00	12.300	84.200	6155.88	1298.89	255.93	1273.43	1.35	
6396.00	12.100	83.500	6244.82	1318.04	257.99	1292.55	0.27	
6486.00	12.200	80.000	6332.81	1336.95	260.71	1311.28	0.83	
6577.00	12.000	78.200	6421.79	1356.02	264.31	1330.01	0.47	
6668.00	10.000	72.300	6511.11	1373.33	268.65	1346.80	2.52	
6759.00	10.600	77.900	6600.65	1389.56	272.81	1362.51	1.28	
6849.00	9.900	75.400	6689.21	1405.56	276.49	1378.09	0.92	
6940.00	8.800	75.800	6779.00	1420.32	280.17	1392.41	1.21	
7031.00	7.100	75.100	6869.13	1432.88	283.33	1404.60	1.87	
7122.00	6.600	78.200	6959.48	1443.72	285.84	1415.15	0.68	
7212.00	5.500	78.200	7048.97	1453.21	287.78	1424.44	1.22	
7303.00	4.300	77.500	7139.64	1460.98	289.41	1432.04	1.32	
7394.00	3.500	75.800	7230.43	1467.17	290.83	1438.06	0.89	
7485.00	3.100	89.500	7321.28	1472.36	291.54	1443.21	0.97	
7576.00	1.600	79.600	7412.20	1476.05	291.79	1446.92	1.70	
7667.00	1.600	83.900	7503.16	1478.58	292.15	1449.44	0.13	
7803.00	1.000	80.700	7639.13	1481.66	292.54	1452.50	0.44	
7939.00	1.000	85.900	7775.11	1484.02	292.82	1454.85	0.07	
8075.00	1.100	92.300	7911.08	1486.47	292.85	1457.34	0.11	
8211.00	1.000	87.700	8047.06	1488.91	292.85	1459.83	0.10	



# Actual Wellpath Report

PINNACLE 16-2 awp

Page 4 of 5



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 PINNACLE 16-2 (386'FSL & 1958'FEL)
Area	COLORADO	Well	PINNACLE 16-2
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PINNACLE 16-2 awb
Facility	SEC.02-T1N-R68W		

## WELLPATH DATA (93 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8347.00	0.800	71.200	8183.04	1491.02	293.20	1461.91	0.24	
8450.00	0.900	60.000	8286.03	1492.50	293.84	1463.29	0.19	LAST BHI MWD SURVEY
8500.00	0.900	60.000	8336.03	1493.25	294.23	1463.97	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS Ref Wellbore: PINNACLE 16-2 awb Ref Wellpath: PINNACLE 16-2 awp

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	15.00	935.00	920.00	15.00	931.42	0.00	0.00	4.87	69.73
8.625in Casing Surface	15.00	925.00	910.00	15.00	921.48	0.00	0.00	4.72	68.61
7.875in Open Hole	925.00	8500.00	7575.00	921.48	8336.03	4.72	68.61	294.23	1463.97

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
PINNACLE 16-2 GEO TARGET 50' RADIUS (660'FSL & 510'FEL, REV-1)		6000.00	287.83	1446.86	3150287.68	1270607.27	40°04'29.849"N	104°57'46.652"W	circle
PINNACLE 16-2 LEGAL BOX (197'S,203'N,349'W,51'E OF GEO TARGET)		6000.00	290.83	1297.86	3150138.67	1270609.38	40°04'29.879"N	104°57'48.569"W	square

## WELLPATH COMPOSITION Ref Wellbore: PINNACLE 16-2 awb Ref Wellpath: PINNACLE 16-2 awp

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	880.00	NaviTrak (Standard)	BHI NAVITRAK 12.25 HOLE <149-880>	PINNACLE 16-2 awb
880.00	8450.00	NaviTrak (Standard)	BHI NAVITRAK 7.875 HOLE <949-8450>	PINNACLE 16-2 awb
8450.00	8500.00	Blind Drilling (std)	Projection to bit	PINNACLE 16-2 awb



# Actual Wellpath Report

PINNACLE 16-2 awp

Page 5 of 5



INTEQ

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Area	COLORADO	Well	PINNACLE 16-2
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PINNACLE 16-2 awb
Facility	SEC.02-T1N-R68W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8450.00	0.900	60.000	8286.03	LAST BHI MWD SURVEY
8500.00	0.900	60.000	8336.03	PROJECTION TO BIT