

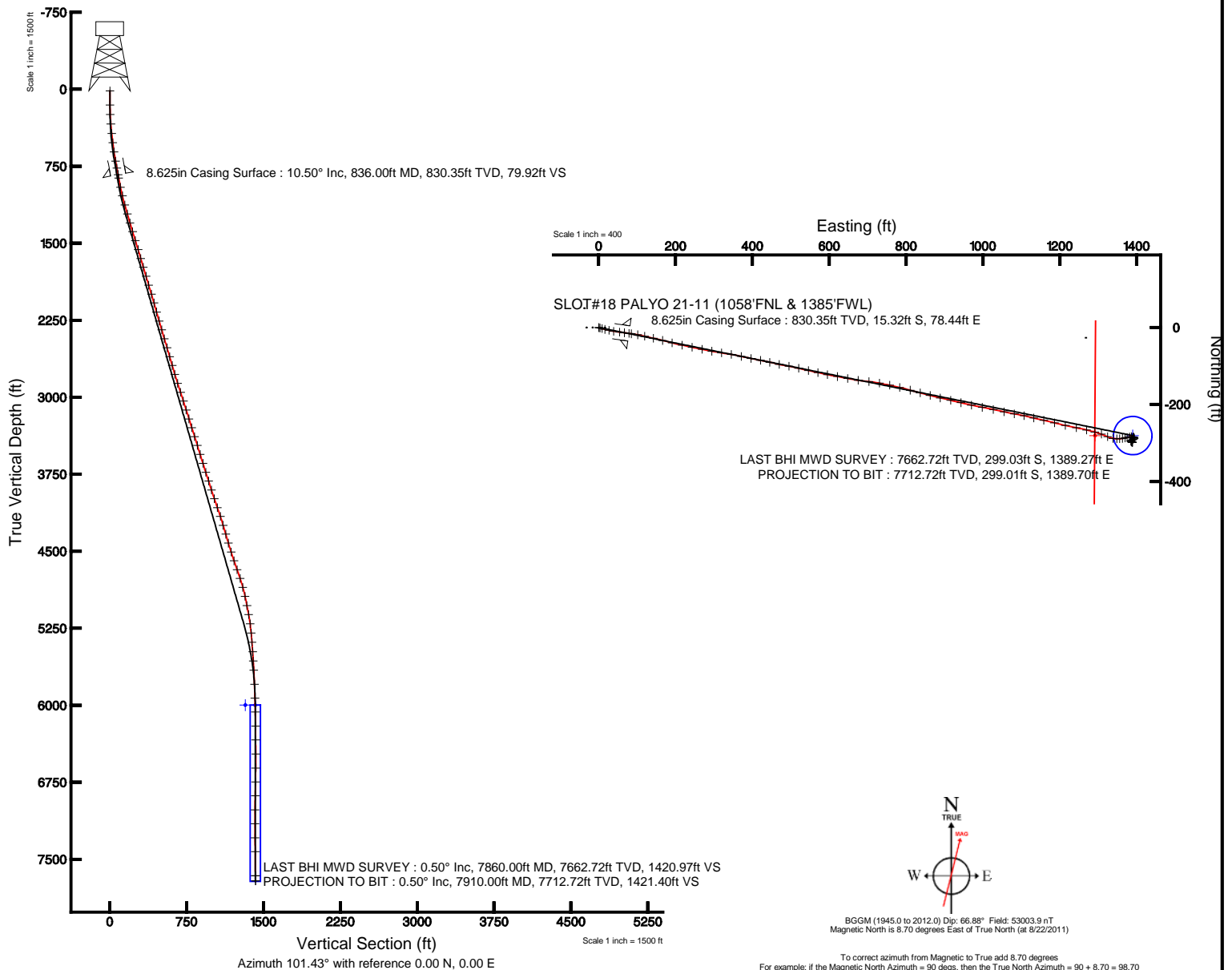


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)
Field: WELD COUNTY (KERR MCGEE) Well: PALYO 21-11
Facility: SEC.11-T2N-R65W Wellbore: PALYO 21-11 PWB



Plot reference wellpath is PALYO 21-11 (REV-A-3) PWP	
True vertical depths are referenced to XTREME 12 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 12 (RKB)	North Reference: True north
XTREME 12 (RKB) to Mean Sea Level: 4869 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Spot	Created by: cookdawn on 11/4/2011





Actual Wellpath Report

PALYO 21-11 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)
Area	COLORADO	Well	PALYO 21-11
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PALYO 21-11 AWB
Facility	SEC.11-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.1
North Reference	True	User	Cookdanm
Scale	0.999958	Report Generated	11/4/2011 at 4:02:00 PM
Convergence at slot	0.56° East	Database/Source file	WA_Denver/PALYO_21-11_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	3617.54	-1897.93	3241626.57	1301423.79	40°09'27.252"N	104°38'07.836"W
Facility Reference Pt			3243559.87	1297825.24	40°08'51.504"N	104°37'43.392"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	4869.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RKB) to Mean Sea Level	4869.00ft
Vertical Reference Pt	XTREME 12 (RKB)	XTREME 12 (RKB) to Mud Line at Slot (SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL))	4869.00ft
MD Reference Pt	XTREME 12 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	101.43°



Actual Wellpath Report

PALYO 21-11 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)
Area	COLORADO	Well	PALYO 21-11
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PALYO 21-11 AWB
Facility	SEC.11-T2N-R65W		

WELLPATH DATA (81 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	136.200	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	136.200	15.00	0.00	0.00	0.00	0.00	
153.00	0.800	136.200	153.00	0.79	-0.70	0.67	0.58	
245.00	2.600	99.600	244.95	3.40	-1.51	3.17	2.19	
337.00	4.200	104.900	336.79	8.85	-2.72	8.48	1.77	
429.00	5.900	105.600	428.43	16.93	-4.86	16.29	1.85	
521.00	7.200	102.500	519.83	27.41	-7.38	26.48	1.46	
612.00	8.900	98.900	609.93	40.15	-9.70	39.00	1.95	
703.00	10.700	97.500	699.59	55.61	-11.89	54.33	2.00	
771.00	10.500	98.200	766.43	68.09	-13.60	66.72	0.35	
870.00	10.500	98.600	863.78	86.11	-16.24	84.57	0.07	
961.00	11.300	99.300	953.13	103.30	-18.92	101.57	0.89	
1047.00	13.500	103.900	1037.13	121.75	-22.69	119.63	2.80	
1138.00	15.900	102.100	1125.14	144.83	-27.86	142.13	2.68	
1229.00	15.700	104.900	1212.70	169.59	-33.64	166.22	0.87	
1320.00	17.100	103.500	1300.00	195.25	-39.93	191.13	1.60	
1410.00	17.000	102.500	1386.04	221.63	-45.86	216.84	0.34	
1501.00	17.100	101.800	1473.04	248.31	-51.48	242.92	0.25	
1592.00	16.700	101.400	1560.11	274.76	-56.80	268.84	0.46	
1683.00	16.300	100.400	1647.37	300.60	-61.69	294.21	0.54	
1773.00	16.700	99.600	1733.66	326.16	-66.12	319.39	0.51	
1864.00	16.900	98.200	1820.78	352.43	-70.19	345.37	0.50	
1955.00	16.600	103.200	1907.92	378.63	-75.05	371.12	1.62	
2046.00	16.900	101.100	1995.06	404.85	-80.56	396.75	0.74	
2136.00	15.500	101.100	2081.48	429.96	-85.39	421.39	1.56	
2227.00	15.900	102.500	2169.09	454.58	-90.43	445.49	0.61	
2318.00	16.300	102.800	2256.52	479.81	-95.96	470.12	0.45	
2408.00	16.500	99.600	2342.86	505.21	-100.89	495.03	1.03	
2499.00	16.900	103.500	2430.02	531.35	-106.13	520.64	1.31	
2590.00	16.100	102.100	2517.28	557.18	-111.87	545.84	0.98	
2681.00	16.500	102.400	2604.62	582.72	-117.29	570.80	0.45	
2771.00	16.300	102.400	2690.96	608.13	-122.74	595.61	0.22	
2862.00	16.900	99.300	2778.17	634.11	-127.62	621.14	1.18	
2953.00	18.100	101.400	2864.95	661.47	-132.55	648.05	1.49	
3044.00	17.900	98.600	2951.50	689.57	-137.44	675.74	0.98	
3135.00	17.700	95.400	3038.15	717.30	-140.83	703.34	1.10	
3225.00	18.000	101.400	3123.82	744.81	-144.87	730.59	2.07	
3316.00	16.900	101.100	3210.63	772.10	-150.20	757.36	1.21	
3407.00	17.800	103.900	3297.49	799.22	-156.08	783.84	1.35	
3498.00	17.900	104.900	3384.11	827.08	-163.02	810.85	0.35	
3588.00	16.700	105.600	3470.04	853.78	-170.05	836.68	1.35	
3679.00	17.700	103.900	3556.97	880.64	-176.89	862.70	1.23	
3770.00	17.300	102.800	3643.76	907.99	-183.22	889.32	0.57	
3861.00	18.000	103.200	3730.47	935.57	-189.42	916.20	0.78	
3951.00	17.500	103.200	3816.19	963.00	-195.69	942.92	0.56	



Actual Wellpath Report

PALYO 21-11 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)
Area	COLORADO	Well	PALYO 21-11
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PALYO 21-11 AWB
Facility	SEC.11-T2N-R65W		

WELLPATH DATA (81 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4042.00	18.300	102.100	3902.78	990.96	-201.81	970.21	0.95	
4133.00	18.500	101.400	3989.13	1019.68	-207.66	998.33	0.33	
4224.00	19.200	101.400	4075.25	1049.08	-213.47	1027.15	0.77	
4314.00	18.300	102.100	4160.47	1078.01	-219.36	1055.47	1.03	
4405.00	16.600	100.300	4247.28	1105.30	-224.67	1082.24	1.96	
4496.00	16.300	101.700	4334.56	1131.06	-229.59	1107.53	0.55	
4587.00	16.400	104.600	4421.88	1156.66	-235.42	1132.47	0.90	
4677.00	18.200	101.400	4507.81	1183.40	-241.40	1158.54	2.26	
4768.00	18.500	104.900	4594.18	1212.03	-247.92	1186.43	1.25	
4859.00	19.300	102.400	4680.28	1241.48	-254.86	1215.07	1.25	
4949.00	18.700	101.100	4765.37	1270.77	-260.83	1243.75	0.82	
5040.00	15.600	103.200	4852.32	1297.60	-266.44	1269.99	3.47	
5131.00	12.400	105.900	4940.60	1319.58	-271.91	1291.30	3.59	
5222.00	11.100	110.500	5029.70	1337.97	-277.65	1308.90	1.76	
5312.00	11.100	114.400	5118.01	1354.97	-284.27	1324.91	0.83	
5403.00	7.300	96.800	5207.84	1369.27	-288.57	1338.63	5.15	
5494.00	5.600	92.300	5298.27	1379.42	-289.44	1348.81	1.95	
5584.00	4.200	85.900	5387.94	1386.93	-289.38	1356.49	1.67	
5675.00	4.800	80.300	5478.65	1393.69	-288.50	1363.56	0.82	
5766.00	3.900	80.300	5569.39	1400.13	-287.33	1370.37	0.99	
5857.00	3.200	76.800	5660.22	1405.33	-286.23	1375.89	0.80	
5993.00	2.300	75.700	5796.06	1411.24	-284.69	1382.23	0.66	
6129.00	1.800	96.500	5931.97	1415.82	-284.26	1387.00	0.65	
6265.00	1.600	106.000	6067.91	1419.84	-285.02	1390.94	0.25	
6401.00	0.400	117.200	6203.89	1422.19	-285.76	1393.19	0.89	
6537.00	0.500	152.000	6339.89	1423.03	-286.51	1393.89	0.21	
6673.00	0.700	174.200	6475.88	1423.65	-287.86	1394.26	0.22	
6810.00	0.800	218.800	6612.87	1423.46	-289.43	1393.74	0.42	
6946.00	1.200	238.200	6748.85	1421.98	-290.92	1391.94	0.38	
7082.00	1.800	247.700	6884.80	1419.17	-292.48	1388.75	0.48	
7218.00	0.900	221.600	7020.76	1416.86	-294.09	1386.06	0.79	
7354.00	0.400	144.000	7156.76	1416.67	-295.28	1385.63	0.66	
7490.00	0.800	152.700	7292.75	1417.61	-296.50	1386.35	0.30	
7626.00	0.700	139.700	7428.74	1418.86	-297.98	1387.32	0.14	
7860.00	0.500	87.700	7662.72	1420.97	-299.03	1389.27	0.24	LAST BHI MWD SURVEY
7910.00	0.500	87.700	7712.72	1421.40	-299.01	1389.70	0.00	PROJECTION TO BIT



Actual Wellpath Report

PALYO 21-11 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 PALYO 21-11 (1058'FNL & 1385'FWL)
Area	COLORADO	Well	PALYO 21-11
Field	WELD COUNTY (KERR MCGEE)	Wellbore	PALYO 21-11 AWB
Facility	SEC.11-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: PALYO 21-11 AWB Ref Wellpath: PALYO 21-11 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	836.00	821.00	15.00	830.35	0.00	0.00	-15.32	78.44
8.625in Casing Surface	15.00	836.00	821.00	15.00	830.35	0.00	0.00	-15.32	78.44
7.875in Open Hole	836.00	7910.00	7074.00	830.35	7712.72	-15.32	78.44	-299.01	1389.70

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PALYO 21-11 GEO TARGET 50' RADIUS (1330'FNL & 2570'FEL,REV-1)		6000.00	-281.18	1390.31	3243019.49	1301156.19	40°09'24.473"N	104°37'49.930"W	circle
PALYO 21-11 HARDLINE 98'W OF GEO TARGET		6000.00	-281.20	1292.34	3242921.53	1301155.22	40°09'24.473"N	104°37'51.192"W	point

WELLPATH COMPOSITION - Ref Wellbore: PALYO 21-11 AWB Ref Wellpath: PALYO 21-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7860.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-7860>	PALYO 21-11 AWB
7860.00	7910.00	Blind Drilling (std)	Projection to bit	PALYO 21-11 AWB



Actual Wellpath Report

PALYO 21-11 AWP

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	PALYO 21-11 AWB
Facility	SEC.11-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7860.00	0.500	87.700	7662.72	LAST BHI MWD SURVEY
7910.00	0.500	87.700	7712.72	PROJECTION TO BIT