

KERR-MCGEE OIL & GAS ONSHORE LP (WA)



ocation: COLORADO Slot: SLOT#45 JAGUAR FED 6S-35HZ
Field: WELD COUNTY (UTM/TRUE NORTH) Well: JAGUAR FED 6S-35HZ
Facility: SEC.23-T1N-R67W Wellbore: JAGUAR FED 6S-35HZ PWB
Plot reference wellpath is JAGUAR FED 6S-35HZ (PERMIT REV-1) PWP
True vertical depths are referenced to PERMIT (17KB) (RKB)
Measured depths are referenced to PERMIT (17KB) (RKB)
PERMIT (17KB) (RKB) to Mean Sea Level: 5009 feet
Mean Sea Level to Mud line (At Slot: SLOT#45 JAGUAR FED 6S-35HZ): 0 feet
Coordinates are in feet referenced to Slot
Grid System: NAD83 / UTM Zone 13 North, US feet
North Reference: True north
Scale: True distance
Depths are in feet
Created by: amarc on 03/Aug/2015

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.23-T1N-R67W		1682234.967	14541905.318	40°02'29.645"N	104°51'01.336"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
SLOT#45 JAGUAR FED 6S-35HZ	-4156.36	-2966.95	1679336.189	14537745.642	40°01'48.569"N
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#45 JAGUAR FED 6S-35HZ)					5009ft
Mean Sea Level to Mud line (At Slot: SLOT#45 JAGUAR FED 6S-35HZ)					0ft
PERMIT (17KB) (RKB) to Mean Sea Level					5009ft

Survey Program

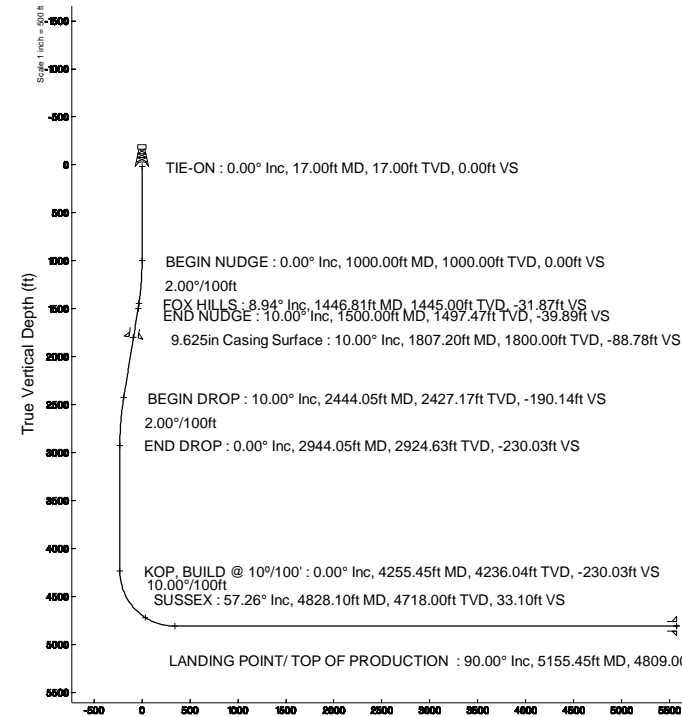
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comments	Wellbore
17.00	5155.52	ISCWSA MWD, Rev. 2, axial magnetic correction	Custom APC, ISCWSA REV 2 MWD+PR+SC (approximation)		JAGUAR FED 6S-35HZ PWB
5155.52	10386.90	ISCWSA MWD, Rev. 2, axial magnetic correction	Custom APC, ISCWSA REV 2 MWD+PR+SC (approximation)		JAGUAR FED 6S-35HZ PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
JAGUAR FED 6S-35HZ BHL	10386.90	4809.00	-5573.81	-128.02	1679216.91	14532173.87	40°00'53.487"N	104°51'41.122"W
JAGUAR FED 6S-35HZ LANDBOX	5009.00	0.00	0.00	0.00	1679336.19	14537745.64	40°01'48.569"N	104°51'39.477"W
JAGUAR FED 6S-35HZ SHL	5009.00	0.00	0.00	0.00	1679336.19	14537745.64	40°01'48.569"N	104°51'39.477"W
SEC.14-T1N-R67W LINES	5009.00	1.98	2778.78	1682113.85	14537751.95	14537751.95	40°01'48.567"N	104°51'03.755"W
SEC.23-T1N-R67W LINES	5009.00	1.98	2778.78	1682113.85	14537751.95	14537751.95	40°01'48.567"N	104°51'03.755"W
SEC.26-T1N-R67W LINES	5009.00	1.98	2778.78	1682113.85	14537751.95	14537751.95	40°01'48.567"N	104°51'03.755"W
SEC.35-T1N-R67W LINES	5009.00	1.98	2778.78	1682113.85	14537751.95	14537751.95	40°01'48.567"N	104°51'03.755"W

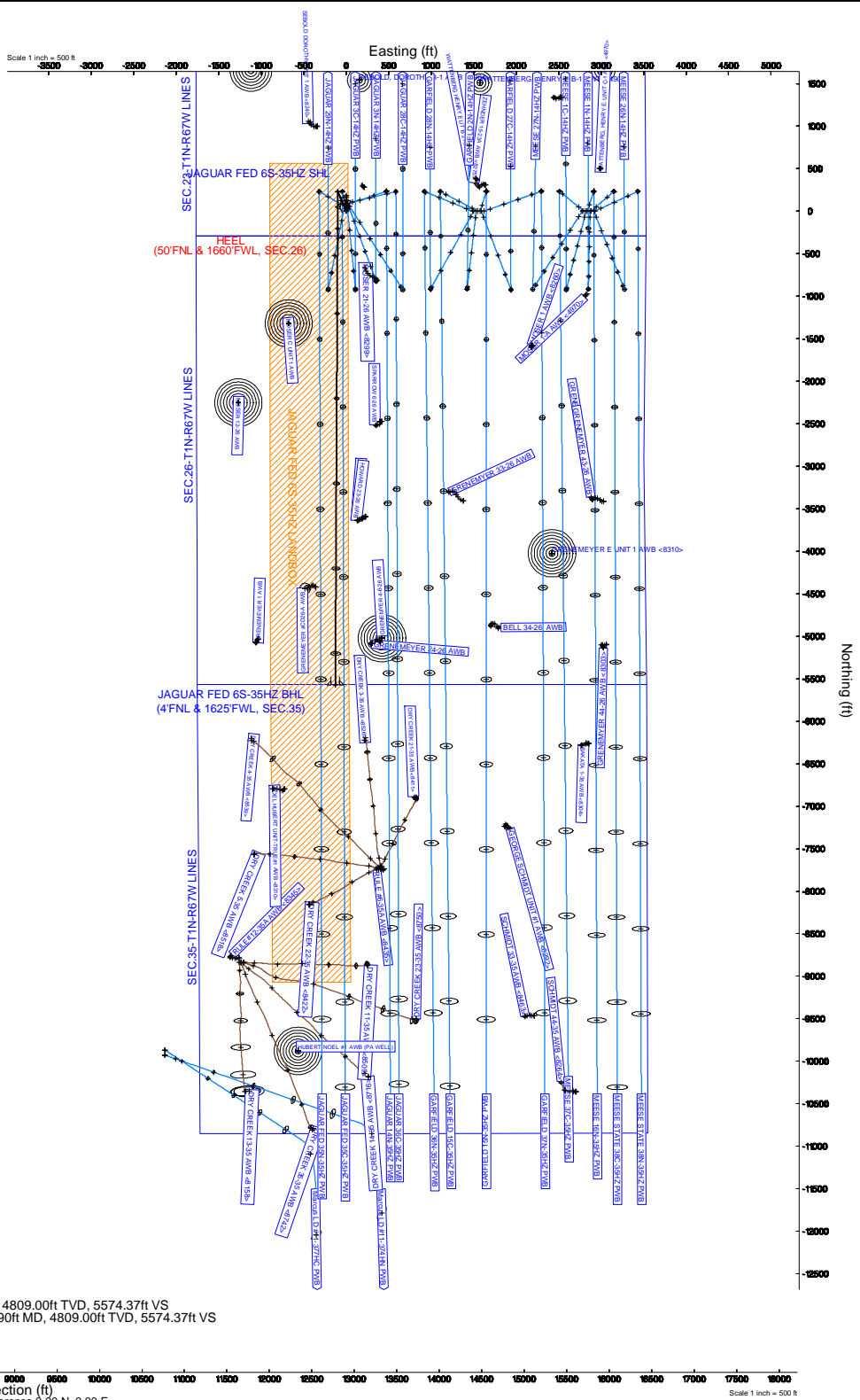
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
BEGIN NUDGE	1000.00	0.00	336.707	1000.00	0.00	0.00	0.00	0.00
END NUDGE	1500.00	10.00	336.707	1497.47	39.98	-17.21	2.00	-39.89
BEGIN DROP	2444.05	10.00	336.707	2427.17	190.55	-82.04	0.00	-190.14
END DROP	2944.05	0.00	180.284	2924.63	230.52	-99.25	2.00	-230.03
KOP, BUILD @ 10°/100'	4255.45	0.00	180.284	4236.04	230.52	-99.25	0.00	-230.03
LANDING POINT/ TOP OF PRODUCTION	5155.45	90.00	180.284	4809.00	-342.43	-102.09	10.00	342.93
TOTAL DEPTH	10386.90	90.00	180.284	4809.00	-5573.81	-128.02	0.00	5574.37



JAGUAR FED 6S-35HZ BHL
TOTAL DEPTH : 90.00° Inc, 10386.90ft MD, 4809.00ft TVD, 5574.37ft VS
5.5in Casing Production : 90.00° Inc, 10386.90ft MD, 4809.00ft TVD, 5574.37ft VS

Vertical Section (ft)
Azimuth 180.28° with reference 0.00 N, 0.00 E



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Amarcar
Scale	0.999602	Report Generated	03/Aug/2015 at 12:19
Convergence at slot	0.09° East	Database/Source file	KERR MCGEE UTM/JAGUAR_FED_6S-35HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4156.36	-2966.95	1679336.19	14537745.64	40°01'48.569"N	104°51'39.477"W
Facility Reference Pt			1682294.97	14541905.32	40°02'29.645"N	104°51'01.336"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to Facility Vertical Datum	5009.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	5009.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#45 JAGUAR FED 6S-35HZ)	5009.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.28°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

WELLPATH DATA (114 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	336.707	0.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
17.00	0.000	336.707	17.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	TIE-ON
117.00†	0.000	336.707	117.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
217.00†	0.000	336.707	217.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
317.00†	0.000	336.707	317.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
417.00†	0.000	336.707	417.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
517.00†	0.000	336.707	517.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
617.00†	0.000	336.707	617.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
717.00†	0.000	336.707	717.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
817.00†	0.000	336.707	817.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
917.00†	0.000	336.707	917.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	
1000.00	0.000	336.707	1000.00	0.00	0.00	0.00	40°01'48.569"N	104°51'39.477"W	0.00	BEGIN NUDGE
1017.00†	0.340	336.707	1017.00	-0.05	0.05	-0.02	40°01'48.569"N	104°51'39.477"W	2.00	
1117.00†	2.340	336.707	1116.97	-2.19	2.19	-0.94	40°01'48.591"N	104°51'39.489"W	2.00	
1217.00†	4.340	336.707	1216.79	-7.53	7.55	-3.25	40°01'48.644"N	104°51'39.519"W	2.00	
1317.00†	6.340	336.707	1316.35	-16.06	16.09	-6.93	40°01'48.728"N	104°51'39.566"W	2.00	
1417.00†	8.340	336.707	1415.53	-27.77	27.83	-11.98	40°01'48.844"N	104°51'39.631"W	2.00	
1446.81†	8.936	336.707	1445.00	-31.87	31.94	-13.75	40°01'48.885"N	104°51'39.654"W	2.00	FOX HILLS
1500.00	10.000	336.707	1497.47	-39.89	39.98	-17.21	40°01'48.964"N	104°51'39.698"W	2.00	END NUDGE
1517.00†	10.000	336.707	1514.21	-42.59	42.69	-18.38	40°01'48.991"N	104°51'39.713"W	0.00	
1617.00†	10.000	336.707	1612.69	-58.51	58.64	-25.24	40°01'49.148"N	104°51'39.802"W	0.00	
1717.00†	10.000	336.707	1711.17	-74.43	74.59	-32.11	40°01'49.306"N	104°51'39.890"W	0.00	
1817.00†	10.000	336.707	1809.65	-90.34	90.53	-38.98	40°01'49.464"N	104°51'39.978"W	0.00	
1917.00†	10.000	336.707	1908.13	-106.26	106.48	-45.84	40°01'49.621"N	104°51'40.066"W	0.00	
2017.00†	10.000	336.707	2006.61	-122.17	122.43	-52.71	40°01'49.779"N	104°51'40.155"W	0.00	
2117.00†	10.000	336.707	2105.09	-138.09	138.38	-59.58	40°01'49.937"N	104°51'40.243"W	0.00	
2217.00†	10.000	336.707	2203.57	-154.00	154.33	-66.45	40°01'50.094"N	104°51'40.331"W	0.00	
2317.00†	10.000	336.707	2302.05	-169.92	170.28	-73.31	40°01'50.252"N	104°51'40.419"W	0.00	
2417.00†	10.000	336.707	2400.53	-185.83	186.23	-80.18	40°01'50.409"N	104°51'40.508"W	0.00	
2444.05	10.000	336.707	2427.17	-190.14	190.55	-82.04	40°01'50.452"N	104°51'40.532"W	0.00	BEGIN DROP
2517.00†	8.541	336.707	2499.17	-200.91	201.34	-86.68	40°01'50.559"N	104°51'40.591"W	2.00	
2617.00†	6.541	336.707	2598.30	-212.93	213.39	-91.87	40°01'50.678"N	104°51'40.658"W	2.00	
2717.00†	4.541	336.707	2697.83	-221.78	222.26	-95.69	40°01'50.765"N	104°51'40.707"W	2.00	
2817.00†	2.541	336.707	2797.63	-227.44	227.93	-98.13	40°01'50.821"N	104°51'40.739"W	2.00	
2917.00†	0.541	336.707	2897.59	-229.91	230.40	-99.20	40°01'50.846"N	104°51'40.752"W	2.00	
2944.05	0.000	180.284	2924.63	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	2.00	END DROP
3017.00†	0.000	180.284	2997.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3117.00†	0.000	180.284	3097.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3217.00†	0.000	180.284	3197.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3317.00†	0.000	180.284	3297.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3417.00†	0.000	180.284	3397.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3517.00†	0.000	180.284	3497.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3617.00†	0.000	180.284	3597.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3717.00†	0.000	180.284	3697.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
3817.00†	0.000	180.284	3797.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

WELLPATH DATA (114 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	0.000	180.284	3897.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
4017.00†	0.000	180.284	3997.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
4117.00†	0.000	180.284	4097.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
4217.00†	0.000	180.284	4197.59	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	
4255.45	0.000	180.284	4236.04	-230.03	230.52	-99.25	40°01'50.847"N	104°51'40.753"W	0.00	KOP, BUILD @ 10°/100'
4317.00†	6.155	180.284	4297.47	-226.72	227.22	-99.26	40°01'50.814"N	104°51'40.753"W	10.00	
4417.00†	16.155	180.284	4395.46	-207.40	207.90	-99.36	40°01'50.623"N	104°51'40.754"W	10.00	
4517.00†	26.155	180.284	4488.60	-171.36	171.85	-99.54	40°01'50.267"N	104°51'40.757"W	10.00	
4617.00†	36.155	180.284	4574.07	-119.69	120.19	-99.79	40°01'49.757"N	104°51'40.760"W	10.00	
4717.00†	46.155	180.284	4649.27	-53.96	54.46	-100.12	40°01'49.107"N	104°51'40.764"W	10.00	
4817.00†	56.155	180.284	4711.91	23.82	-23.32	-100.50	40°01'48.339"N	104°51'40.769"W	10.00	
4828.10†	57.264	180.284	4718.00	33.10	-32.60	-100.55	40°01'48.247"N	104°51'40.770"W	10.00	SUSSEX
4917.00†	66.155	180.284	4760.09	111.30	-110.80	-100.94	40°01'47.474"N	104°51'40.775"W	10.00	
5017.00†	76.155	180.284	4792.35	205.82	-205.32	-101.41	40°01'46.540"N	104°51'40.781"W	10.00	
5117.00†	86.155	180.284	4807.71	304.51	-304.01	-101.90	40°01'45.565"N	104°51'40.787"W	10.00	
5155.45	90.000	180.284	4809.00	342.93	-342.43	-102.09	40°01'45.185"N	104°51'40.789"W	10.00	LANDING POINT/ TOP OF PRODUCTION
5217.00†	90.000	180.284	4809.00	404.48	-403.98	-102.39	40°01'44.577"N	104°51'40.793"W	0.00	
5317.00†	90.000	180.284	4809.00	504.48	-503.97	-102.89	40°01'43.589"N	104°51'40.800"W	0.00	
5417.00†	90.000	180.284	4809.00	604.48	-603.97	-103.38	40°01'42.600"N	104°51'40.806"W	0.00	
5517.00†	90.000	180.284	4809.00	704.48	-703.97	-103.88	40°01'41.612"N	104°51'40.812"W	0.00	
5617.00†	90.000	180.284	4809.00	804.48	-803.97	-104.38	40°01'40.624"N	104°51'40.819"W	0.00	
5717.00†	90.000	180.284	4809.00	904.48	-903.97	-104.87	40°01'39.636"N	104°51'40.825"W	0.00	
5817.00†	90.000	180.284	4809.00	1004.48	-1003.97	-105.37	40°01'38.648"N	104°51'40.831"W	0.00	
5917.00†	90.000	180.284	4809.00	1104.48	-1103.97	-105.86	40°01'37.659"N	104°51'40.838"W	0.00	
6017.00†	90.000	180.284	4809.00	1204.48	-1203.97	-106.36	40°01'36.671"N	104°51'40.844"W	0.00	
6117.00†	90.000	180.284	4809.00	1304.48	-1303.97	-106.85	40°01'35.683"N	104°51'40.851"W	0.00	
6217.00†	90.000	180.284	4809.00	1404.48	-1403.96	-107.35	40°01'34.695"N	104°51'40.857"W	0.00	
6317.00†	90.000	180.284	4809.00	1504.48	-1503.96	-107.85	40°01'33.706"N	104°51'40.863"W	0.00	
6417.00†	90.000	180.284	4809.00	1604.48	-1603.96	-108.34	40°01'32.718"N	104°51'40.870"W	0.00	
6517.00†	90.000	180.284	4809.00	1704.48	-1703.96	-108.84	40°01'31.730"N	104°51'40.876"W	0.00	
6617.00†	90.000	180.284	4809.00	1804.48	-1803.96	-109.33	40°01'30.742"N	104°51'40.882"W	0.00	
6717.00†	90.000	180.284	4809.00	1904.48	-1903.96	-109.83	40°01'29.754"N	104°51'40.889"W	0.00	
6817.00†	90.000	180.284	4809.00	2004.48	-2003.96	-110.32	40°01'28.765"N	104°51'40.895"W	0.00	
6917.00†	90.000	180.284	4809.00	2104.48	-2103.96	-110.82	40°01'27.777"N	104°51'40.902"W	0.00	
7017.00†	90.000	180.284	4809.00	2204.48	-2203.95	-111.32	40°01'26.789"N	104°51'40.908"W	0.00	
7117.00†	90.000	180.284	4809.00	2304.48	-2303.95	-111.81	40°01'25.801"N	104°51'40.914"W	0.00	
7217.00†	90.000	180.284	4809.00	2404.48	-2403.95	-112.31	40°01'24.812"N	104°51'40.921"W	0.00	
7317.00†	90.000	180.284	4809.00	2504.48	-2503.95	-112.80	40°01'23.824"N	104°51'40.927"W	0.00	
7417.00†	90.000	180.284	4809.00	2604.48	-2603.95	-113.30	40°01'22.836"N	104°51'40.933"W	0.00	
7517.00†	90.000	180.284	4809.00	2704.48	-2703.95	-113.79	40°01'21.848"N	104°51'40.940"W	0.00	
7617.00†	90.000	180.284	4809.00	2804.48	-2803.95	-114.29	40°01'20.860"N	104°51'40.946"W	0.00	
7717.00†	90.000	180.284	4809.00	2904.48	-2903.95	-114.79	40°01'19.871"N	104°51'40.952"W	0.00	
7817.00†	90.000	180.284	4809.00	3004.48	-3003.94	-115.28	40°01'18.883"N	104°51'40.959"W	0.00	
7917.00†	90.000	180.284	4809.00	3104.48	-3103.94	-115.78	40°01'17.895"N	104°51'40.965"W	0.00	
8017.00†	90.000	180.284	4809.00	3204.48	-3203.94	-116.27	40°01'16.907"N	104°51'40.972"W	0.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

WELLPATH DATA (114 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8117.00†	90.000	180.284	4809.00	3304.48	-3303.94	-116.77	40°01'15.919"N	104°51'40.978"W	0.00	
8217.00†	90.000	180.284	4809.00	3404.48	-3403.94	-117.26	40°01'14.930"N	104°51'40.984"W	0.00	
8317.00†	90.000	180.284	4809.00	3504.48	-3503.94	-117.76	40°01'13.942"N	104°51'40.991"W	0.00	
8417.00†	90.000	180.284	4809.00	3604.48	-3603.94	-118.26	40°01'12.954"N	104°51'40.997"W	0.00	
8517.00†	90.000	180.284	4809.00	3704.48	-3703.94	-118.75	40°01'11.966"N	104°51'41.003"W	0.00	
8617.00†	90.000	180.284	4809.00	3804.48	-3803.93	-119.25	40°01'10.977"N	104°51'41.010"W	0.00	
8717.00†	90.000	180.284	4809.00	3904.48	-3903.93	-119.74	40°01'09.989"N	104°51'41.016"W	0.00	
8817.00†	90.000	180.284	4809.00	4004.48	-4003.93	-120.24	40°01'09.001"N	104°51'41.022"W	0.00	
8917.00†	90.000	180.284	4809.00	4104.48	-4103.93	-120.74	40°01'08.013"N	104°51'41.029"W	0.00	
9017.00†	90.000	180.284	4809.00	4204.48	-4203.93	-121.23	40°01'07.025"N	104°51'41.035"W	0.00	
9117.00†	90.000	180.284	4809.00	4304.48	-4303.93	-121.73	40°01'06.036"N	104°51'41.042"W	0.00	
9217.00†	90.000	180.284	4809.00	4404.48	-4403.93	-122.22	40°01'05.048"N	104°51'41.048"W	0.00	
9317.00†	90.000	180.284	4809.00	4504.48	-4503.93	-122.72	40°01'04.060"N	104°51'41.054"W	0.00	
9417.00†	90.000	180.284	4809.00	4604.48	-4603.92	-123.21	40°01'03.072"N	104°51'41.061"W	0.00	
9517.00†	90.000	180.284	4809.00	4704.48	-4703.92	-123.71	40°01'02.084"N	104°51'41.067"W	0.00	
9617.00†	90.000	180.284	4809.00	4804.48	-4803.92	-124.21	40°01'01.095"N	104°51'41.073"W	0.00	
9717.00†	90.000	180.284	4809.00	4904.48	-4903.92	-124.70	40°01'00.107"N	104°51'41.080"W	0.00	
9817.00†	90.000	180.284	4809.00	5004.48	-5003.92	-125.20	40°00'59.119"N	104°51'41.086"W	0.00	
9917.00†	90.000	180.284	4809.00	5104.48	-5103.92	-125.69	40°00'58.131"N	104°51'41.092"W	0.00	
10017.00†	90.000	180.284	4809.00	5204.48	-5203.92	-126.19	40°00'57.142"N	104°51'41.099"W	0.00	
10117.00†	90.000	180.284	4809.00	5304.48	-5303.92	-126.68	40°00'56.154"N	104°51'41.105"W	0.00	
10217.00†	90.000	180.284	4809.00	5404.48	-5403.91	-127.18	40°00'55.166"N	104°51'41.112"W	0.00	
10317.00†	90.000	180.284	4809.00	5504.48	-5503.91	-127.68	40°00'54.178"N	104°51'41.118"W	0.00	
10386.90	90.000	180.284	4809.00†	5574.37	-5573.81	-128.02	40°00'53.487"N	104°51'41.122"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: JAGUAR FED 6S-35HZ PWB Ref Wellpath: JAGUAR FED 6S-35HZ (PERMIT REV-1) PWP

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]
13.5in Open Hole	17.00	1807.20	1790.20	17.00	1800.00	0.00	0.00	88.97	-38.31
9.625in Casing Surface	17.00	1807.20	1790.20	17.00	1800.00	0.00	0.00	88.97	-38.31
7.875in Open Hole	1807.20	10386.90	8579.69	1800.00	4809.00	88.97	-38.31	-5573.81	-128.02
5.5in Casing Production	17.00	10386.90	10369.90	17.00	4809.00	0.00	0.00	-5573.81	-128.02

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) JAGUAR FED 6S-35HZ BHL	10386.90	4809.00	-5573.81	-128.02	1679216.91	14532173.87	40°00'53.487"N	104°51'41.122"W	point
JAGUAR FED 6S-35HZ LANDBOX		5009.00	0.00	0.00	1679336.19	14537745.64	40°01'48.569"N	104°51'39.477"W	polygon
JAGUAR FED 6S-35HZ SHL		5009.00	0.00	0.00	1679336.19	14537745.64	40°01'48.569"N	104°51'39.477"W	point
SEC.14-T1N-R67W LINES		5009.00	1.98	2778.78	1682113.85	14537751.95	40°01'48.587"N	104°51'03.755"W	polygon
SEC.23-T1N-R67W LINES		5009.00	1.98	2778.78	1682113.85	14537751.95	40°01'48.587"N	104°51'03.755"W	polygon
SEC.26-T1N-R67W LINES		5009.00	1.98	2778.78	1682113.85	14537751.95	40°01'48.587"N	104°51'03.755"W	polygon
SEC.35-T1N-R67W LINES		5009.00	1.98	2778.78	1682113.85	14537751.95	40°01'48.587"N	104°51'03.755"W	polygon

SURVEY PROGRAM - Ref Wellbore: JAGUAR FED 6S-35HZ PWB Ref Wellpath: JAGUAR FED 6S-35HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	5155.52	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)		JAGUAR FED 6S-35HZ PWB
5155.52	10386.90	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)		JAGUAR FED 6S-35HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#45 JAGUAR FED 6S-35HZ
Area	COLORADO	Well	JAGUAR FED 6S-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JAGUAR FED 6S-35HZ PWB
Facility	SEC.23-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1446.81	8.936	336.707	1445.00	FOX HILLS
4828.10	57.264	180.284	4718.00	SUSSEX

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	336.707	17.00	TIE-ON
1000.00	0.000	336.707	1000.00	BEGIN NUDGE
1500.00	10.000	336.707	1497.47	END NUDGE
2444.05	10.000	336.707	2427.17	BEGIN DROP
2944.05	0.000	180.284	2924.63	END DROP
4255.45	0.000	180.284	4236.04	KOP, BUILD @ 10°/100'
5155.45	90.000	180.284	4809.00	LANDING POINT/ TOP OF PRODUCTION
10386.90	90.000	180.284	4809.00	TOTAL DEPTH