

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)  
Field: WELD COUNTY (KERR MCGEE) Well: TURKEY SPRINGS 2C-14HZ  
Facility: SEC.23-T2N-R66W Wellbore: TURKEY SPRINGS 2C-14HZ PWB

Plot reference wellpath is TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

True vertical depths are referenced to ENSGIN 138 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSGIN 138 (RKB)	North Reference: True north
ENSGIN 138 (RKB) to Mean Sea Level: 5115 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjlgf02 on 5/7/2013

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.23-T2N-R66W			3212854.294	1286435.355	40°07'01.741"N	104°44'20.062"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL SEC.23)	478.90	135.62	3212949.138	1291186.037	40°07'48.680"N	104°44'18.316"W
ENSGIN 138 (RKB) to Mud line (At Slot: SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL SEC.23))					5115R	
Mean Sea Level to Mud line (At Slot: SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL SEC.23))					0R	
ENSGIN 138 (RKB) to Mean Sea Level					5115R	

## Survey Program

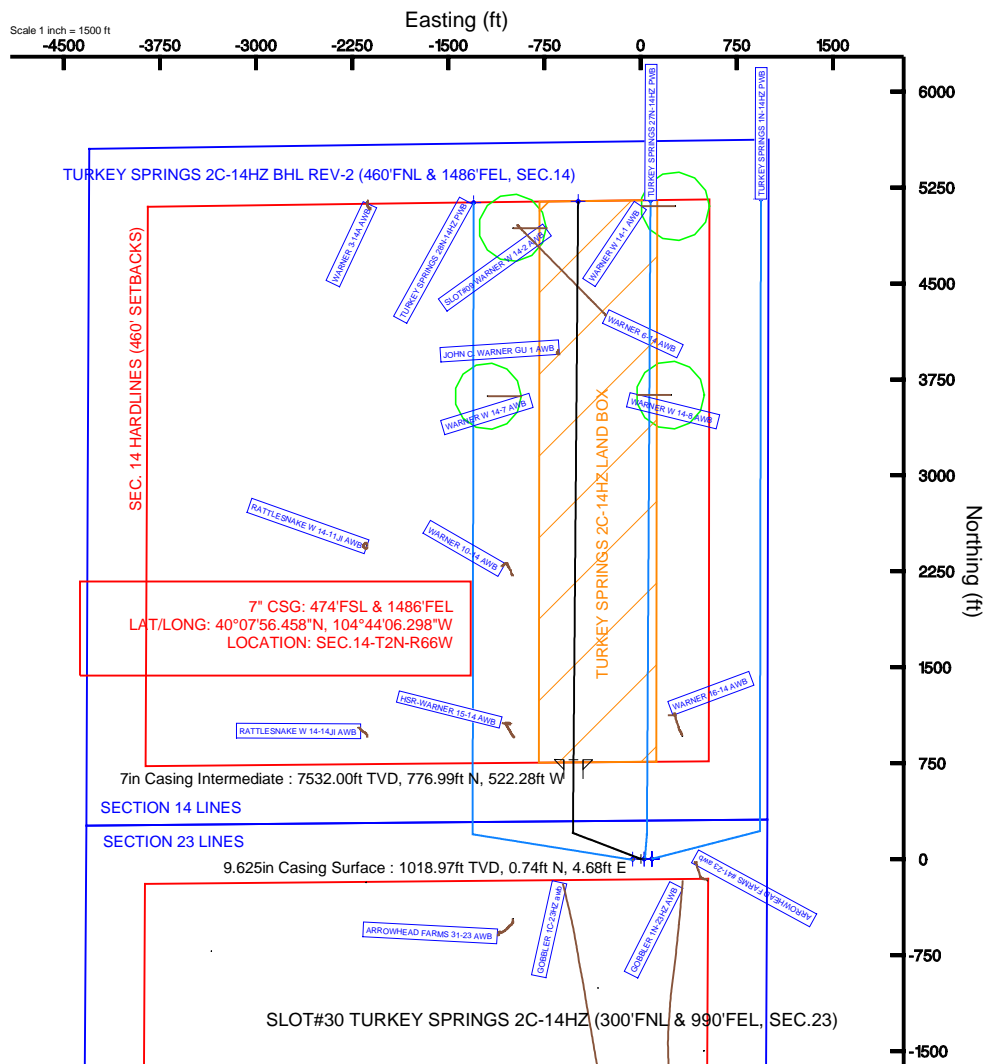
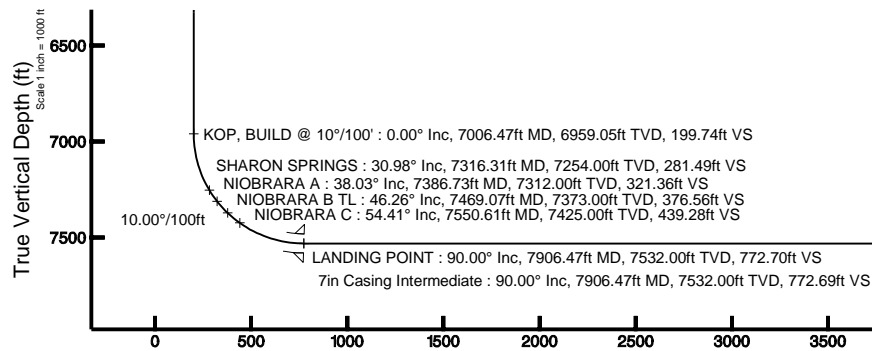
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	929.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		TURKEY SPRINGS 2C-14HZ AWB
929.00	7906.47	NavTrak	NavTrak (MAGCORR,IFR)		TURKEY SPRINGS 2C-14HZ PWB
7906.47	12272.78	OnTrak	OnTrak (MAGCORR,IFR)		TURKEY SPRINGS 2C-14HZ PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO'S	929.00	0.390	123.350	928.97	1.07	4.17	0.00	1.11
BEGIN NUDGE	1250.04	0.390	123.350	1250.00	-0.13	5.99	0.00	-0.08
END NUDGE	1769.10	10.000	291.000	1766.53	15.09	-34.72	2.00	14.81
BEGIN DROP	4554.89	10.000	291.000	4510.00	188.45	-486.33	0.00	184.47
END DROP	5054.89	0.000	0.468	5007.47	204.05	-526.96	2.00	199.74
KOP, BUILD @ 10°/100'	7006.47	0.000	0.468	6959.05	204.05	-526.96	0.00	199.74
LANDING POINT	7906.47	90.000	0.468	7532.00	776.99	-522.28	10.00	772.70
TOTAL DEPTH	12272.78	90.000	0.467	7532.00	5143.15	-486.67	0.00	5139.00

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SECTION 14 LINES		0.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.159"W
SECTION 23 LINES		0.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.159"W
SEC. 14 HARDLINES (460' SETBACKS)		7000.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.159"W
SEC. 23 HARDLINES (460' SETBACKS)		7000.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.159"W
TURKEY SPRINGS 2C-14HZ BHL ON PLAT REV.1 (460'FNL & 1738'FEL, SEC.14)		7532.00	5143.15	-736.67	3212148.35	1296322.45	40°08'39.505"N	104°44'27.802"W
TURKEY SPRINGS 2C-14HZ BHL REV.2 (460'FNL & 1486'FEL, SEC.14)	12272.78	7532.00	5143.15	-486.67	3212418.34	1296324.60	40°08'39.505"N	104°44'24.583"W
TURKEY SPRINGS 27N-14HZ/2C-14HZ LAND BOX		8000.00	0.40	29.98	3212979.11	1291186.70	40°07'48.684"N	104°44'17.330"W





# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999959	Report Generated	5/7/2013 at 10:14:03
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/TURKEY_SPRINGS_2C-14HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	4749.90	135.62	3212949.14	1291186.04	40°07'48.680"N	104°44'18.316"W
Facility Reference Pt			3212854.29	1286435.36	40°07'01.741"N	104°44'20.062"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	ENSGIN 138 (RKB) to Facility Vertical Datum	5115.00ft
Horizontal Reference Pt	Slot	ENSGIN 138 (RKB) to Mean Sea Level	5115.00ft
Vertical Reference Pt	ENSGIN 138 (RKB)	ENSGIN 138 (RKB) to Mud Line at Slot (SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23))	5115.00ft
MD Reference Pt	ENSGIN 138 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.47°



# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 2 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

## WELLPATH DATA (138 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	197.100	0.00	0.00	0.00	0.00	40°07'48.680"N	104°44'18.316"W	0.00	
13.00	0.000	197.100	13.00	0.00	0.00	0.00	40°07'48.680"N	104°44'18.316"W	0.00	TIE-ON
113.00	0.160	197.100	113.00	-0.13	-0.13	-0.04	40°07'48.679"N	104°44'18.317"W	0.16	BEGIN GYRO SURVEYS
213.00	0.070	340.880	213.00	-0.21	-0.21	-0.10	40°07'48.678"N	104°44'18.317"W	0.22	
313.00	0.220	327.440	313.00	0.01	0.01	-0.23	40°07'48.680"N	104°44'18.319"W	0.15	
413.00	0.310	3.610	413.00	0.44	0.44	-0.31	40°07'48.684"N	104°44'18.320"W	0.19	
513.00	0.470	45.270	513.00	1.00	1.00	0.00	40°07'48.690"N	104°44'18.316"W	0.32	
613.00	0.770	76.250	612.99	1.46	1.45	0.94	40°07'48.694"N	104°44'18.304"W	0.44	
713.00	0.760	94.680	712.98	1.57	1.55	2.25	40°07'48.695"N	104°44'18.287"W	0.25	
813.00	0.520	108.170	812.98	1.39	1.36	3.35	40°07'48.693"N	104°44'18.273"W	0.28	
913.00	0.360	108.210	912.97	1.15	1.12	4.08	40°07'48.691"N	104°44'18.264"W	0.16	
929.00	0.390	123.350	928.97	1.11	1.07	4.17	40°07'48.691"N	104°44'18.262"W	0.00	TIE-INTO GYRO'S
1029.00†	0.390	123.350	1028.97	0.74	0.70	4.74	40°07'48.687"N	104°44'18.255"W	0.00	
1129.00†	0.390	123.350	1128.97	0.37	0.33	5.31	40°07'48.683"N	104°44'18.248"W	0.00	
1229.00†	0.390	123.350	1228.97	0.00	-0.05	5.88	40°07'48.680"N	104°44'18.240"W	0.00	
1250.04	0.390	123.350	1250.00	-0.08	-0.13	5.99	40°07'48.679"N	104°44'18.239"W	0.00	BEGIN NUDGE
1329.00†	1.200	287.617	1328.96	0.02	-0.02	5.43	40°07'48.680"N	104°44'18.246"W	2.00	
1429.00†	3.199	290.017	1428.88	1.26	1.25	1.81	40°07'48.692"N	104°44'18.293"W	2.00	
1529.00†	5.198	290.572	1528.61	3.75	3.79	-5.05	40°07'48.717"N	104°44'18.381"W	2.00	
1629.00†	7.198	290.819	1628.02	7.49	7.61	-15.15	40°07'48.755"N	104°44'18.511"W	2.00	
1729.00†	9.198	290.959	1726.99	12.47	12.70	-28.47	40°07'48.805"N	104°44'18.683"W	2.00	
1769.10	10.000	291.000	1766.53	14.81	15.09	-34.72	40°07'48.829"N	104°44'18.763"W	2.00	END NUDGE
1829.00†	10.000	291.000	1825.52	18.46	18.82	-44.43	40°07'48.866"N	104°44'18.888"W	0.00	
1929.00†	10.000	291.000	1924.00	24.55	25.04	-60.64	40°07'48.927"N	104°44'19.097"W	0.00	
2029.00†	10.000	291.000	2022.48	30.64	31.27	-76.85	40°07'48.989"N	104°44'19.305"W	0.00	
2129.00†	10.000	291.000	2120.96	36.73	37.49	-93.06	40°07'49.050"N	104°44'19.514"W	0.00	
2229.00†	10.000	291.000	2219.44	42.82	43.71	-109.27	40°07'49.112"N	104°44'19.723"W	0.00	
2329.00†	10.000	291.000	2317.92	48.91	49.94	-125.48	40°07'49.173"N	104°44'19.931"W	0.00	
2429.00†	10.000	291.000	2416.40	55.00	56.16	-141.69	40°07'49.235"N	104°44'20.140"W	0.00	
2529.00†	10.000	291.000	2514.89	61.09	62.38	-157.91	40°07'49.296"N	104°44'20.349"W	0.00	
2629.00†	10.000	291.000	2613.37	67.18	68.61	-174.12	40°07'49.358"N	104°44'20.558"W	0.00	
2729.00†	10.000	291.000	2711.85	73.27	74.83	-190.33	40°07'49.419"N	104°44'20.766"W	0.00	
2829.00†	10.000	291.000	2810.33	79.36	81.05	-206.54	40°07'49.481"N	104°44'20.975"W	0.00	
2929.00†	10.000	291.000	2908.81	85.45	87.27	-222.75	40°07'49.542"N	104°44'21.184"W	0.00	
3029.00†	10.000	291.000	3007.29	91.54	93.50	-238.96	40°07'49.604"N	104°44'21.392"W	0.00	
3129.00†	10.000	291.000	3105.77	97.63	99.72	-255.17	40°07'49.665"N	104°44'21.601"W	0.00	
3229.00†	10.000	291.000	3204.25	103.72	105.94	-271.39	40°07'49.727"N	104°44'21.810"W	0.00	
3329.00†	10.000	291.000	3302.73	109.81	112.17	-287.60	40°07'49.788"N	104°44'22.019"W	0.00	
3429.00†	10.000	291.000	3401.21	115.90	118.39	-303.81	40°07'49.850"N	104°44'22.227"W	0.00	
3529.00†	10.000	291.000	3499.69	121.99	124.61	-320.02	40°07'49.911"N	104°44'22.436"W	0.00	
3629.00†	10.000	291.000	3598.17	128.08	130.84	-336.23	40°07'49.973"N	104°44'22.645"W	0.00	
3729.00†	10.000	291.000	3696.65	134.17	137.06	-352.44	40°07'50.034"N	104°44'22.853"W	0.00	
3829.00†	10.000	291.000	3795.14	140.27	143.28	-368.65	40°07'50.096"N	104°44'23.062"W	0.00	
3929.00†	10.000	291.000	3893.62	146.36	149.50	-384.87	40°07'50.157"N	104°44'23.271"W	0.00	
4029.00†	10.000	291.000	3992.10	152.45	155.73	-401.08	40°07'50.219"N	104°44'23.480"W	0.00	



# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 3 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

## WELLPATH DATA (138 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4129.00†	10.000	291.000	4090.58	158.54	161.95	-417.29	40°07'50.280"N	104°44'23.688"W	0.00	
4229.00†	10.000	291.000	4189.06	164.63	168.17	-433.50	40°07'50.342"N	104°44'23.897"W	0.00	
4259.40†	10.000	291.000	4219.00	166.48	170.07	-438.43	40°07'50.361"N	104°44'23.960"W	0.00	PARKMAN
4329.00†	10.000	291.000	4287.54	170.72	174.40	-449.71	40°07'50.403"N	104°44'24.106"W	0.00	
4429.00†	10.000	291.000	4386.02	176.81	180.62	-465.92	40°07'50.465"N	104°44'24.314"W	0.00	
4529.00†	10.000	291.000	4484.50	182.90	186.84	-482.13	40°07'50.526"N	104°44'24.523"W	0.00	
4554.89	10.000	291.000	4510.00	184.47	188.45	-486.33	40°07'50.542"N	104°44'24.577"W	0.00	BEGIN DROP
4629.00†	8.518	291.000	4583.14	188.66	192.73	-497.46	40°07'50.584"N	104°44'24.720"W	2.00	
4635.94†	8.379	291.000	4590.00	189.01	193.09	-498.42	40°07'50.588"N	104°44'24.733"W	2.00	SUSSEX
4729.00†	6.518	291.000	4682.28	193.25	197.41	-509.68	40°07'50.631"N	104°44'24.878"W	2.00	
4829.00†	4.518	291.000	4781.81	196.62	200.86	-518.65	40°07'50.665"N	104°44'24.993"W	2.00	
4929.00†	2.518	291.000	4881.61	198.77	203.06	-524.38	40°07'50.687"N	104°44'25.067"W	2.00	
5029.00†	0.518	291.000	4981.57	199.70	204.01	-526.86	40°07'50.696"N	104°44'25.099"W	2.00	
5054.89	0.000	0.468	5007.47	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	2.00	END DROP
5129.00†	0.000	0.468	5081.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5229.00†	0.000	0.468	5181.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5329.00†	0.000	0.468	5281.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5429.00†	0.000	0.468	5381.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5529.00†	0.000	0.468	5481.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5629.00†	0.000	0.468	5581.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5729.00†	0.000	0.468	5681.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5829.00†	0.000	0.468	5781.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
5929.00†	0.000	0.468	5881.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6029.00†	0.000	0.468	5981.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6129.00†	0.000	0.468	6081.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6229.00†	0.000	0.468	6181.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6329.00†	0.000	0.468	6281.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6429.00†	0.000	0.468	6381.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6529.00†	0.000	0.468	6481.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6629.00†	0.000	0.468	6581.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6729.00†	0.000	0.468	6681.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6829.00†	0.000	0.468	6781.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
6929.00†	0.000	0.468	6881.57	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	
7006.47	0.000	0.468	6959.05	199.74	204.05	-526.96	40°07'50.696"N	104°44'25.100"W	0.00	KOP, BUILD @ 10°/100'
7029.00†	2.253	0.468	6981.57	200.18	204.49	-526.96	40°07'50.701"N	104°44'25.100"W	10.00	
7129.00†	12.253	0.468	7080.64	212.79	217.10	-526.86	40°07'50.825"N	104°44'25.099"W	10.00	
7229.00†	22.253	0.468	7176.02	242.41	246.72	-526.62	40°07'51.118"N	104°44'25.096"W	10.00	
7316.31†	30.984	0.468	7254.00	281.49	285.80	-526.30	40°07'51.504"N	104°44'25.092"W	10.00	SHARON SPRINGS
7329.00†	32.253	0.468	7264.81	288.15	292.45	-526.24	40°07'51.570"N	104°44'25.091"W	10.00	
7386.73†	38.026	0.468	7312.00	321.36	325.67	-525.97	40°07'51.898"N	104°44'25.088"W	10.00	NIOBRARA A
7429.00†	42.253	0.468	7344.30	348.60	352.91	-525.75	40°07'52.167"N	104°44'25.085"W	10.00	
7469.07†	46.260	0.468	7373.00	376.56	380.87	-525.52	40°07'52.444"N	104°44'25.082"W	10.00	NIOBRARA B TL
7529.00†	52.253	0.468	7412.09	421.94	426.25	-525.15	40°07'52.892"N	104°44'25.077"W	10.00	
7550.61†	54.414	0.468	7425.00	439.28	443.58	-525.01	40°07'53.063"N	104°44'25.075"W	10.00	NIOBRARA C
7629.00†	62.253	0.468	7466.12	505.94	510.24	-524.46	40°07'53.722"N	104°44'25.068"W	10.00	



# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 4 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

## WELLPATH DATA (138 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7729.00†	72.253	0.468	7504.74	598.05	602.35	-523.71	40°07'54.632"N	104°44'25.058"W	10.00	
7829.00†	82.253	0.468	7526.77	695.46	699.75	-522.92	40°07'55.595"N	104°44'25.048"W	10.00	
7906.47	90.000	0.468	7532.00	772.70	776.99	-522.28	40°07'56.358"N	104°44'25.040"W	10.00	LANDING POINT
7929.00†	90.000	0.468	7532.00	795.22	799.52	-522.10	40°07'56.581"N	104°44'25.038"W	0.00	
8029.00†	90.000	0.468	7532.00	895.22	899.51	-521.28	40°07'57.569"N	104°44'25.027"W	0.00	
8129.00†	90.000	0.468	7532.00	995.22	999.51	-520.47	40°07'58.557"N	104°44'25.017"W	0.00	
8229.00†	90.000	0.468	7532.00	1095.22	1099.51	-519.65	40°07'59.545"N	104°44'25.006"W	0.00	
8329.00†	90.000	0.468	7532.00	1195.22	1199.50	-518.83	40°08'00.534"N	104°44'24.996"W	0.00	
8429.00†	90.000	0.468	7532.00	1295.22	1299.50	-518.02	40°08'01.522"N	104°44'24.985"W	0.00	
8529.00†	90.000	0.468	7532.00	1395.22	1399.50	-517.20	40°08'02.510"N	104°44'24.975"W	0.00	
8629.00†	90.000	0.468	7532.00	1495.22	1499.49	-516.38	40°08'03.498"N	104°44'24.964"W	0.00	
8729.00†	90.000	0.468	7532.00	1595.22	1599.49	-515.57	40°08'04.486"N	104°44'24.954"W	0.00	
8829.00†	90.000	0.468	7532.00	1695.22	1699.49	-514.75	40°08'05.474"N	104°44'24.943"W	0.00	
8929.00†	90.000	0.468	7532.00	1795.22	1799.48	-513.94	40°08'06.463"N	104°44'24.933"W	0.00	
9029.00†	90.000	0.468	7532.00	1895.22	1899.48	-513.12	40°08'07.451"N	104°44'24.922"W	0.00	
9129.00†	90.000	0.468	7532.00	1995.22	1999.48	-512.30	40°08'08.439"N	104°44'24.912"W	0.00	
9229.00†	90.000	0.468	7532.00	2095.22	2099.47	-511.49	40°08'09.427"N	104°44'24.901"W	0.00	
9329.00†	90.000	0.468	7532.00	2195.22	2199.47	-510.67	40°08'10.415"N	104°44'24.891"W	0.00	
9429.00†	90.000	0.468	7532.00	2295.22	2299.47	-509.85	40°08'11.403"N	104°44'24.881"W	0.00	
9529.00†	90.000	0.468	7532.00	2395.22	2399.46	-509.04	40°08'12.392"N	104°44'24.870"W	0.00	
9629.00†	90.000	0.467	7532.00	2495.22	2499.46	-508.22	40°08'13.380"N	104°44'24.860"W	0.00	
9729.00†	90.000	0.467	7532.00	2595.22	2599.46	-507.41	40°08'14.368"N	104°44'24.849"W	0.00	
9829.00†	90.000	0.467	7532.00	2695.22	2699.45	-506.59	40°08'15.356"N	104°44'24.839"W	0.00	
9929.00†	90.000	0.467	7532.00	2795.22	2799.45	-505.77	40°08'16.344"N	104°44'24.828"W	0.00	
10029.00†	90.000	0.467	7532.00	2895.22	2899.45	-504.96	40°08'17.333"N	104°44'24.818"W	0.00	
10129.00†	90.000	0.467	7532.00	2995.22	2999.44	-504.14	40°08'18.321"N	104°44'24.807"W	0.00	
10229.00†	90.000	0.467	7532.00	3095.22	3099.44	-503.33	40°08'19.309"N	104°44'24.797"W	0.00	
10329.00†	90.000	0.467	7532.00	3195.22	3199.44	-502.51	40°08'20.297"N	104°44'24.786"W	0.00	
10429.00†	90.000	0.467	7532.00	3295.22	3299.43	-501.70	40°08'21.285"N	104°44'24.776"W	0.00	
10529.00†	90.000	0.467	7532.00	3395.22	3399.43	-500.88	40°08'22.273"N	104°44'24.765"W	0.00	
10629.00†	90.000	0.467	7532.00	3495.22	3499.43	-500.07	40°08'23.262"N	104°44'24.755"W	0.00	
10729.00†	90.000	0.467	7532.00	3595.22	3599.42	-499.25	40°08'24.250"N	104°44'24.744"W	0.00	
10829.00†	90.000	0.467	7532.00	3695.22	3699.42	-498.44	40°08'25.238"N	104°44'24.734"W	0.00	
10929.00†	90.000	0.467	7532.00	3795.22	3799.42	-497.62	40°08'26.226"N	104°44'24.723"W	0.00	
11029.00†	90.000	0.467	7532.00	3895.22	3899.41	-496.80	40°08'27.214"N	104°44'24.713"W	0.00	
11129.00†	90.000	0.467	7532.00	3995.22	3999.41	-495.99	40°08'28.202"N	104°44'24.702"W	0.00	
11229.00†	90.000	0.467	7532.00	4095.22	4099.41	-495.17	40°08'29.191"N	104°44'24.692"W	0.00	
11329.00†	90.000	0.467	7532.00	4195.22	4199.40	-494.36	40°08'30.179"N	104°44'24.682"W	0.00	
11429.00†	90.000	0.467	7532.00	4295.22	4299.40	-493.54	40°08'31.167"N	104°44'24.671"W	0.00	
11529.00†	90.000	0.467	7532.00	4395.22	4399.40	-492.73	40°08'32.155"N	104°44'24.661"W	0.00	
11629.00†	90.000	0.467	7532.00	4495.22	4499.39	-491.91	40°08'33.143"N	104°44'24.650"W	0.00	
11729.00†	90.000	0.467	7532.00	4595.22	4599.39	-491.10	40°08'34.132"N	104°44'24.640"W	0.00	
11829.00†	90.000	0.467	7532.00	4695.22	4699.39	-490.29	40°08'35.120"N	104°44'24.629"W	0.00	
11929.00†	90.000	0.467	7532.00	4795.22	4799.38	-489.47	40°08'36.108"N	104°44'24.619"W	0.00	
12029.00†	90.000	0.467	7532.00	4895.22	4899.38	-488.66	40°08'37.096"N	104°44'24.608"W	0.00	



# Planned Wellpath Report

## TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 5 of 7



### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

### WELLPATH DATA (138 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12129.00†	90.000	0.467	7532.00	4995.22	4999.38	-487.84	40°08'38.084"N	104°44'24.598"W	0.00	
12229.00†	90.000	0.467	7532.00	5095.22	5099.37	-487.03	40°08'39.072"N	104°44'24.587"W	0.00	
12272.78	90.000	0.467	7532.00 <sup>1</sup>	5139.00	5143.15	-486.67	40°08'39.505"N	104°44'24.583"W	0.00	TOTAL DEPTH

### HOLE & CASING SECTIONS - Ref Wellbore: TURKEY SPRINGS 2C-14HZ PWB Ref Wellpath: TURKEY SPRINGS 2C-14HZ (REV-A.0) 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]
12.25in Open Hole	13.00	929.00	916.00	13.00	928.97	0.00	0.00	1.07	4.17
9.625in Casing Surface	13.00	1019.00	1006.00	13.00	1018.97	0.00	0.00	0.74	4.68
8.75in Open Hole	929.00	7906.47	6977.47	928.97	7532.00	1.07	4.17	776.99	-522.28
7in Casing Intermediate	13.00	7906.47	7893.47	13.00	7532.00	0.00	0.00	776.99	-522.28
6.125in Open Hole	7906.47	12272.78	4366.31	7532.00	NA	776.99	-522.28	NA	NA
4.5in Casing Production	13.00	12272.78	12259.78	13.00	7532.00	0.00	0.00	5143.15	-486.67



# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 14 LINES		0.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.156"W	polygon
SECTION 23 LINES		0.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.156"W	polygon
SEC. 14 HARDLINES (460' SETBACKS)		7000.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.156"W	polygon
SEC. 23 HARDLINES (460' SETBACKS)		7000.00	0.81	90.10	3213039.23	1291187.62	40°07'48.688"N	104°44'17.156"W	polygon
TURKEY SPRINGS 2C-14HZ BHL ON PLAT REV-1 (460'FNL & 1736'FEL, SEC.14)		7532.00	5143.15	-736.67	3212168.35	1296322.45	40°08'39.505"N	104°44'27.802"W	point
1) TURKEY SPRINGS 2C-14HZ BHL REV-2 (460'FNL & 1486'FEL, SEC.14)	12272.78	7532.00	5143.15	-486.67	3212418.34	1296324.60	40°08'39.505"N	104°44'24.583"W	point
TURKEY SPRINGS 27N-14HZ/2C-14HZ LAND BOX		8000.00	0.40	29.98	3212979.11	1291186.70	40°07'48.684"N	104°44'17.930"W	polygon

SURVEY PROGRAM - Ref Wellbore: TURKEY SPRINGS 2C-14HZ PWB Ref Wellpath: TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	929.00	Generic gyro - continuous (Standard)		TURKEY SPRINGS 2C-14HZ AWB
929.00	7906.47	NaviTrak (MAGCORR,IFR)		TURKEY SPRINGS 2C-14HZ PWB
7906.47	12272.78	OnTrak (MAGCORR,IFR)		TURKEY SPRINGS 2C-14HZ PWB





# Planned Wellpath Report

TURKEY SPRINGS 2C-14HZ (REV-A.0) PWP

Page 7 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 TURKEY SPRINGS 2C-14HZ (300'FNL & 990'FEL, SEC.23)
Area	COLORADO	Well	TURKEY SPRINGS 2C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	TURKEY SPRINGS 2C-14HZ PWB
Facility	SEC.23-T2N-R66W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	197.100	13.00	TIE-ON
113.00	0.160	197.100	113.00	BEGIN GYRO SURVEYS
4259.40	10.000	291.000	4219.00	PARKMAN
4635.94	8.379	291.000	4590.00	SUSSEX
7316.31	30.984	0.468	7254.00	SHARON SPRINGS
7386.73	38.026	0.468	7312.00	NIOBRARA A
7469.07	46.260	0.468	7373.00	NIOBRARA B TL
7550.61	54.414	0.468	7425.00	NIOBRARA C