

KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: NORTHGLENN STATE 6-36
 Facility: SEC.36-T1N-R68W Wellbore: NORTHGLENN STATE 6-36 PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	301.191	15.00	0.00	0.00	0.00	0.00
End of Tangent	1100.00	0.000	301.191	1100.00	0.00	0.00	0.00	0.00
End of Build (S)	1750.00	13.000	301.191	1744.44	38.03	-62.81	2.00	73.42
End of Tangent (S)	5318.70	13.000	301.191	5221.67	453.78	-749.55	0.00	876.21
End of Drop (S)	5968.70	0.000	301.191	5866.11	491.80	-812.36	2.00	949.63
End of Tangent	8585.59	0.000	301.191	8483.00	491.80	-812.36	0.00	949.63

Location Information

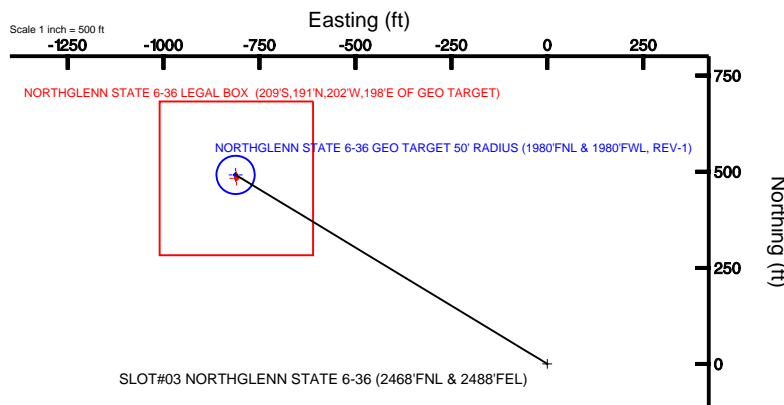
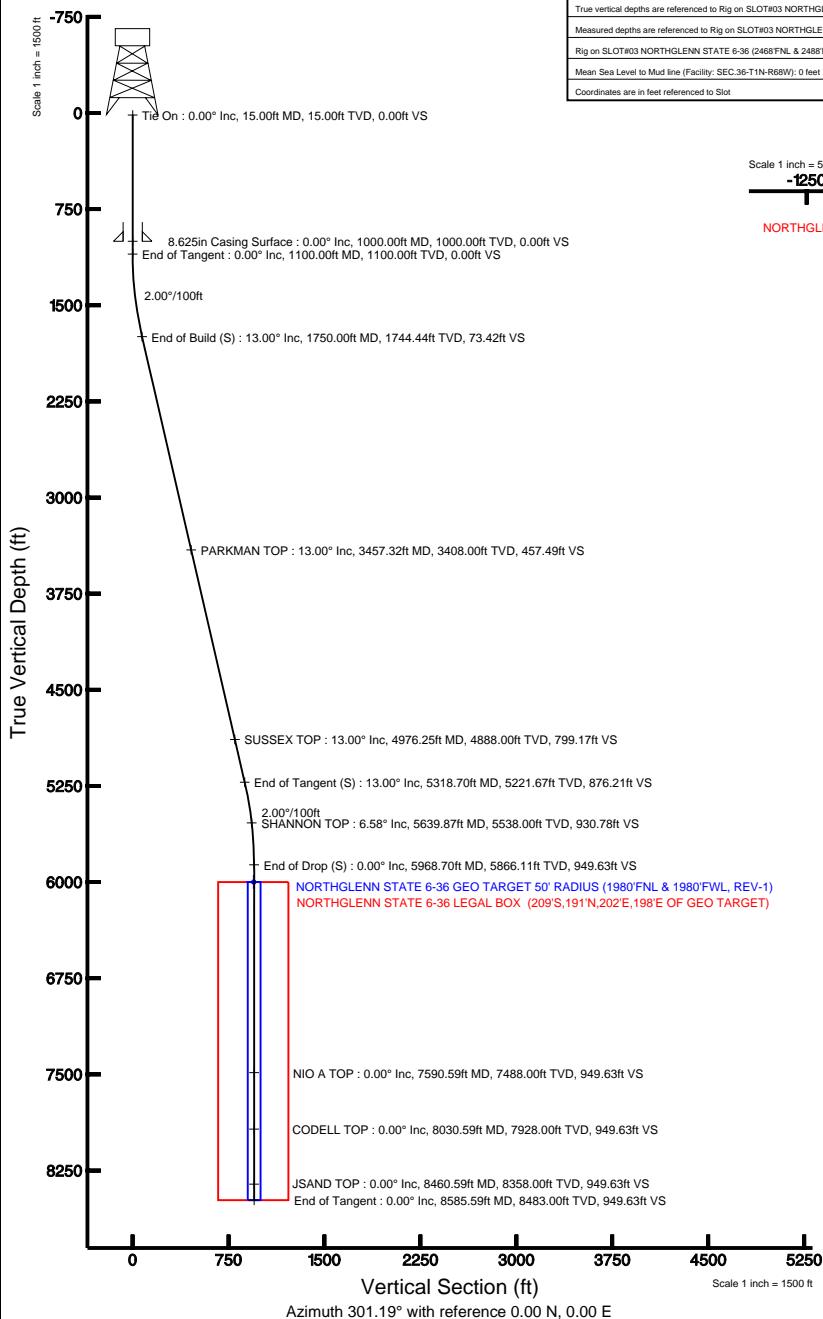
Facility Name				Grid East (USR)	Grid North (USR)	Latitude	Longitude
SEC.36-T1N-R68W				3153664.397	1246309.186	40°00'29.520"N	104°57'05.148"W
Slot	Local N (ft)	Local E (ft)	Grid East (USR)	Grid North (USR)	Latitude	Longitude	
SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)	-32.79	0.00	3153664.599	1246276.402	40°00'29.196"N	104°57'05.148"W	
Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT) to Mud line (Facility: SEC.36-T1N-R68W)						5161ft	
Mean Sea Level to Mud line (Facility: SEC.36-T1N-R68W)						0ft	
Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT) to Mean Sea Level						5161ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USR)	Grid North (USR)	Latitude	Longitude
NORTHGLENN STATE 6-36 GEO TARGET 50' RADIUS (1980'FNL & 1980'FWL, REV-1)	6000.00	491.80	-812.36	3152849.24	1246763.15	40°00'34.056"N	104°57'15.588"W	
NORTHGLENN STATE 6-36 LEGAL BOX (209°N,191°S,202°E,198°W OF GEO TARGET)	8000.00	482.80	-810.36	3152851.30	1246754.16	40°00'33.967"N	104°57'15.562"W	

Plot reference wellpath is NORTHGLENN STATE 6-36 (REV-A.0) PWP

True vertical depths are referenced to Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT)	North Reference: True north
Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT) to Mean Sea Level: 5161 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.36-T1N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 10/13/2009



BGGM (1945.0 to 2011.0) Dip: 66.78° Field: 53126.6 nT
 Magnetic North is 9.12 degrees East of True North (at 10/13/2009)

To correct azimuth from Magnetic to True add 9.12 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.12 = 99.12



Planned Wellpath Report

NORTHGLENN STATE 6-36 (REV-A.0) PWP

Page 1 of 5



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 6-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 6-36 PWB
Facility	SEC.36-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	0.999966	Report Generated	10/13/2009 at 5:53:55 PM
Convergence at slot	0.35° East	Database/Source file	Denver Server/NORTHGLENN_STATE_6-36_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-32.79	0.00	3153664.60	1246276.40	40°00'29.196"N	104°57'05.148"W
Facility Reference Pt			3153664.40	1246309.19	40°00'29.520"N	104°57'05.148"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT) Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT) Level
Vertical Reference Pt	Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT)	Facility Vertical Datum to Mud L
MD Reference Pt	Rig on SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL) (RT)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Planned Wellpath Report

NORTHGLENN STATE 6-36 (REV-A.0) PWP

Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 6-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 6-36 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (98 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	301.191	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	301.191	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	301.191	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	301.191	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	301.191	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	301.191	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	301.191	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	301.191	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	301.191	715.00	0.00	0.00	0.00	0.00	
815.00†	0.000	301.191	815.00	0.00	0.00	0.00	0.00	
915.00†	0.000	301.191	915.00	0.00	0.00	0.00	0.00	
1015.00†	0.000	301.191	1015.00	0.00	0.00	0.00	0.00	
1100.00	0.000	301.191	1100.00	0.00	0.00	0.00	0.00	End of Tangent
1115.00†	0.300	301.191	1115.00	0.04	0.02	-0.03	2.00	
1215.00†	2.300	301.191	1214.97	2.31	1.20	-1.97	2.00	
1315.00†	4.300	301.191	1314.80	8.06	4.18	-6.90	2.00	
1415.00†	6.300	301.191	1414.37	17.30	8.96	-14.80	2.00	
1515.00†	8.300	301.191	1513.55	30.01	15.54	-25.67	2.00	
1615.00†	10.300	301.191	1612.23	46.17	23.91	-39.49	2.00	
1715.00†	12.300	301.191	1710.29	65.76	34.06	-56.25	2.00	
1750.00	13.000	301.191	1744.44	73.42	38.03	-62.81	2.00	End of Build (S)
1815.00†	13.000	301.191	1807.77	88.05	45.60	-75.32	0.00	
1915.00†	13.000	301.191	1905.21	110.54	57.25	-94.56	0.00	
2015.00†	13.000	301.191	2002.65	133.04	68.90	-113.81	0.00	
2115.00†	13.000	301.191	2100.08	155.53	80.55	-133.05	0.00	
2215.00†	13.000	301.191	2197.52	178.03	92.20	-152.29	0.00	
2315.00†	13.000	301.191	2294.96	200.52	103.85	-171.54	0.00	
2415.00†	13.000	301.191	2392.39	223.02	115.50	-190.78	0.00	
2515.00†	13.000	301.191	2489.83	245.51	127.15	-210.02	0.00	
2615.00†	13.000	301.191	2587.27	268.01	138.80	-229.27	0.00	
2715.00†	13.000	301.191	2684.70	290.50	150.45	-248.51	0.00	
2815.00†	13.000	301.191	2782.14	313.00	162.10	-267.75	0.00	
2915.00†	13.000	301.191	2879.58	335.49	173.75	-287.00	0.00	
3015.00†	13.000	301.191	2977.02	357.99	185.40	-306.24	0.00	
3115.00†	13.000	301.191	3074.45	380.48	197.05	-325.48	0.00	
3215.00†	13.000	301.191	3171.89	402.98	208.70	-344.73	0.00	
3315.00†	13.000	301.191	3269.33	425.47	220.35	-363.97	0.00	
3415.00†	13.000	301.191	3366.76	447.97	232.00	-383.21	0.00	
3457.32†	13.000	301.191	3408.00	457.49	236.93	-391.36	0.00	PARKMAN TOP
3515.00†	13.000	301.191	3464.20	470.46	243.65	-402.46	0.00	
3615.00†	13.000	301.191	3561.64	492.96	255.30	-421.70	0.00	
3715.00†	13.000	301.191	3659.07	515.45	266.95	-440.94	0.00	
3815.00†	13.000	301.191	3756.51	537.95	278.60	-460.19	0.00	
3915.00†	13.000	301.191	3853.95	560.44	290.25	-479.43	0.00	
4015.00†	13.000	301.191	3951.39	582.94	301.90	-498.67	0.00	



Planned Wellpath Report

NORTHGLENN STATE 6-36 (REV-A.0) PWP

Page 3 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 6-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 6-36 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (98 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4115.00†	13.000	301.191	4048.82	605.43	313.55	-517.92	0.00	
4215.00†	13.000	301.191	4146.26	627.93	325.20	-537.16	0.00	
4315.00†	13.000	301.191	4243.70	650.42	336.85	-556.40	0.00	
4415.00†	13.000	301.191	4341.13	672.92	348.50	-575.65	0.00	
4515.00†	13.000	301.191	4438.57	695.41	360.15	-594.89	0.00	
4615.00†	13.000	301.191	4536.01	717.91	371.80	-614.14	0.00	
4715.00†	13.000	301.191	4633.44	740.40	383.45	-633.38	0.00	
4815.00†	13.000	301.191	4730.88	762.90	395.10	-652.62	0.00	
4915.00†	13.000	301.191	4828.32	785.39	406.74	-671.87	0.00	
4976.25†	13.000	301.191	4888.00	799.17	413.88	-683.65	0.00	SUSSEX TOP
5015.00†	13.000	301.191	4925.76	807.89	418.39	-691.11	0.00	
5115.00†	13.000	301.191	5023.19	830.38	430.04	-710.35	0.00	
5215.00†	13.000	301.191	5120.63	852.88	441.69	-729.60	0.00	
5315.00†	13.000	301.191	5218.07	875.37	453.34	-748.84	0.00	
5318.70	13.000	301.191	5221.67	876.21	453.78	-749.55	0.00	End of Tangent (S)
5415.00†	11.074	301.191	5315.85	896.29	464.18	-766.73	2.00	
5515.00†	9.074	301.191	5414.30	913.78	473.23	-781.69	2.00	
5615.00†	7.074	301.191	5513.31	927.82	480.51	-793.71	2.00	
5639.87†	6.577	301.191	5538.00	930.78	482.04	-796.24	2.00	SHANNON TOP
5715.00†	5.074	301.191	5612.74	938.41	485.99	-802.76	2.00	
5815.00†	3.074	301.191	5712.48	945.51	489.67	-808.84	2.00	
5915.00†	1.074	301.191	5812.41	949.13	491.54	-811.93	2.00	
5968.70	0.000	301.191	5866.11 [†]	949.63	491.80	-812.36	2.00	Drop (S)
6015.00†	0.000	301.191	5912.41	949.63	491.80	-812.36	0.00	
6115.00†	0.000	301.191	6012.41	949.63	491.80	-812.36	0.00	
6215.00†	0.000	301.191	6112.41	949.63	491.80	-812.36	0.00	
6315.00†	0.000	301.191	6212.41	949.63	491.80	-812.36	0.00	
6415.00†	0.000	301.191	6312.41	949.63	491.80	-812.36	0.00	
6515.00†	0.000	301.191	6412.41	949.63	491.80	-812.36	0.00	
6615.00†	0.000	301.191	6512.41	949.63	491.80	-812.36	0.00	
6715.00†	0.000	301.191	6612.41	949.63	491.80	-812.36	0.00	
6815.00†	0.000	301.191	6712.41	949.63	491.80	-812.36	0.00	
6915.00†	0.000	301.191	6812.41	949.63	491.80	-812.36	0.00	
7015.00†	0.000	301.191	6912.41	949.63	491.80	-812.36	0.00	
7115.00†	0.000	301.191	7012.41	949.63	491.80	-812.36	0.00	
7215.00†	0.000	301.191	7112.41	949.63	491.80	-812.36	0.00	
7315.00†	0.000	301.191	7212.41	949.63	491.80	-812.36	0.00	
7415.00†	0.000	301.191	7312.41	949.63	491.80	-812.36	0.00	
7515.00†	0.000	301.191	7412.41	949.63	491.80	-812.36	0.00	
7590.59†	0.000	301.191	7488.00	949.63	491.80	-812.36	0.00	NIO A TOP
7615.00†	0.000	301.191	7512.41	949.63	491.80	-812.36	0.00	
7715.00†	0.000	301.191	7612.41	949.63	491.80	-812.36	0.00	
7815.00†	0.000	301.191	7712.41	949.63	491.80	-812.36	0.00	
7915.00†	0.000	301.191	7812.41	949.63	491.80	-812.36	0.00	
8015.00†	0.000	301.191	7912.41	949.63	491.80	-812.36	0.00	



Planned Wellpath Report

NORTHGLENN STATE 6-36 (REV-A.0) PWP

Page 4 of 5



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 NORTHGLENN STATE 6-36 (2468'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 6-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 6-36 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (98 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8030.59†	0.000	301.191	7928.00	949.63	491.80	-812.36	0.00	CODELL TOP
8115.00†	0.000	301.191	8012.41	949.63	491.80	-812.36	0.00	
8215.00†	0.000	301.191	8112.41	949.63	491.80	-812.36	0.00	
8315.00†	0.000	301.191	8212.41	949.63	491.80	-812.36	0.00	
8415.00†	0.000	301.191	8312.41	949.63	491.80	-812.36	0.00	
8460.59†	0.000	301.191	8358.00	949.63	491.80	-812.36	0.00	JSAND TOP
8515.00†	0.000	301.191	8412.41	949.63	491.80	-812.36	0.00	
8585.59	0.000	301.191	8483.00	949.63	491.80	-812.36	0.00	End of Tangent

HOLE & CASING SECTIONS

Ref Wellbore: NORTHGLENN STATE 6-36 PWB

Ref Wellpath: NORTHGLENN STATE 6-36 (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	15.00	1000.00	985.00	15.00	1000.00	0.00	0.00	0.00	0.00
8.625in Casing Surface	15.00	1000.00	985.00	15.00	1000.00	0.00	0.00	0.00	0.00
7.875in Open Hole	1000.00	8585.59	7585.59	1000.00	8483.00	0.00	0.00	491.80	-812.36

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) NORTHGLENN STATE 6-36 GEO TARGET 50' RADIUS (1980'FNL & 1980'FWL, REV-1)		6000.00	491.80	-812.36	3152849.24	1246763.15	40°00'34.056"N	104°57'15.588"W	circle
NORTHGLENN STATE 6-36 LEGAL BOX (209'S,191'N,202'W,198'E OF GEO TARGET)		6000.00	482.80	-810.36	3152851.30	1246754.16	40°00'33.967"N	104°57'15.562"W	square

SURVEY PROGRAM

Ref Wellbore: NORTHGLENN STATE 6-36 PWB

Ref Wellpath: NORTHGLENN STATE 6-36 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8585.59	MTC (Collar, post-2000) (Standard)		NORTHGLENN STATE 6-36 PWB



Planned Wellpath Report

NORTHGLENN STATE 6-36 (REV-A.0) PWP

Page 5 of 5



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Area	COLORADO	Well	NORTHGLENN STATE 6-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 6-36 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3457.32	13.000	301.191	3408.00	PARKMAN TOP
4976.25	13.000	301.191	4888.00	SUSSEX TOP
5639.87	6.577	301.191	5538.00	SHANNON TOP
7590.59	0.000	301.191	7488.00	NIO A TOP
8030.59	0.000	301.191	7928.00	CODELL TOP
8460.59	0.000	301.191	8358.00	JSAND TOP