

# Downhole Schematic for N Parachute MF05A-16 H17 696



Project : North Piceance

API # : 05045186980000

Surface Location : SENE/Lot7 Sec 17 T6S - R96W 6t

Area : N Parachute

County :

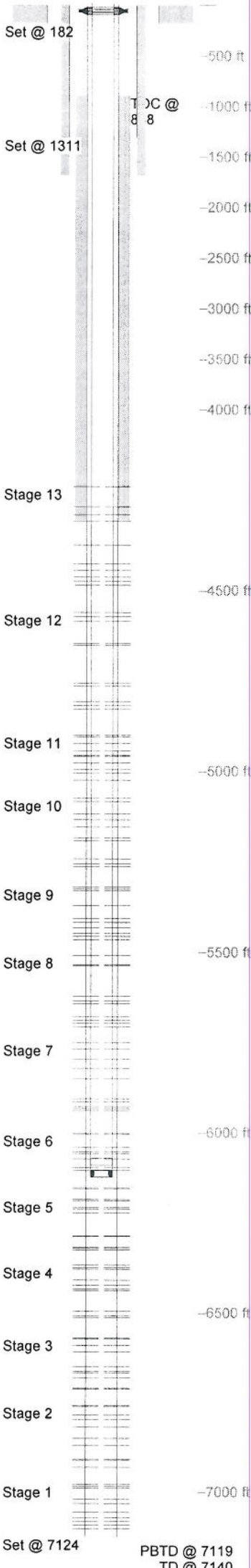
BHL : Lot 5-16-6S-96 W 6th PM

As Of : 09/26/2011

GL : 5654.0 ft

KB to GL : ft

KB : 0.0 ft



Casing Details Section	Hole 26.000	Casing 16	Mass 0	Set At 182	Length 182	Thread	Grade	Description 16"-3/8" WT
Surface	12.250	9.625	0	1,311	2	LT&C	J55	Float Shoe
		9.625	36	1,310	18	LT&C	J55	Shoe Jt.
		9.625	36	1,291	1,264	ST&C	J55	Casing
		9.625	36	27	4	LT&C	J55	Wellhead
		9.625	36	23	26	LT&C	J55	Landing Jt
Production	7.875	4.5	11.6	7,124	2	LT&C	P110	Float Shoe
		4.5	11.6	7,122	1	LT&C	P110	Float Collar
		4.5	11.6	7,121	1	LT&C	P110	Ball Seat
		4.5	11.6	7,120	165	LT&C	E80	Casing
		4.5	11.6	6,955	13	LT&C	P110	Packer 1
		4.5	11.6	6,942	206	LT&C	E80	Casing
		4.5	11.6	6,736	13	LT&C	P110	Packer 2
		4.5	11.6	6,724	165	LT&C	E80	Casing
		4.5	11.6	6,559	13	LT&C	P110	Packer 3
		4.5	11.6	6,546	165	LT&C	E80	Casing
		4.5	11.6	6,382	22	LT&C	E80	Marker A
		4.5	11.6	6,359	13	LT&C	P110	Packer 4
		4.5	11.6	6,347	165	LT&C	E80	Casing
		4.5	11.6	6,182	13	LT&C	P110	Packer 5
		4.5	11.6	6,170	165	LT&C	E80	Casing
		4.5	11.6	6,005	23	LT&C	E80	Marker B
		4.5	11.6	5,983	13	LT&C	P110	Packer 6
		4.5	11.6	5,970	206	LT&C	E80	Casing
		4.5	11.6	5,764	23	LT&C	E80	Marker C
		4.5	11.6	5,741	13	LT&C	P110	Packer 7
		4.5	11.6	5,729	206	LT&C	E80	Casing
		4.5	11.6	5,729	23	LT&C	E80	Marker G
		4.5	11.6	5,500	23	LT&C	E80	Marker D
		4.5	11.6	5,500	13	LT&C	P110	Packer 11
		4.5	11.6	5,465	13	LT&C	P110	Packer 8
		4.5	11.6	5,465	247	LT&C	E80	Casing
		4.5	11.6	5,205	165	LT&C	E80	Casing
		4.5	11.6	5,205	23	LT&C	E80	Marker H
		4.5	11.6	5,018	23	LT&C	E80	Marker E
		4.5	11.6	5,018	12	LT&C	P110	Packer 12
		4.5	11.6	4,983	13	LT&C	P110	Packer 9
		4.5	11.6	4,983	370	LT&C	E80	Casing
		4.5	11.6	4,601	206	LT&C	E80	Casing
		4.5	11.6	4,601	12	LT&C	P110	Packer 13
		4.5	11.6	4,383	22	LT&C	E80	Marker F
		4.5	11.6	4,383	41	LT&C	E80	Casing
		4.5	11.6	4,320	13	LT&C	P110	Packer 10
		4.5	11.6	4,320	2	LT&C	P110	DV Tool
		4.5	11.6	4,305	165	LT&C	E80	Casing
		4.5	11.6	4,305	4,147	LT&C	E80	Casing

Cement Details Section	Sequence	Top 888	Density 12.0	Blend / Additives
Production	Lead			TXI / 0.5%D046+0.4%D013+1.0%D079+0.25lb/skD029+0.2%D112+0.2%D065
Conductor	Tail	4,266	15.8	"G" / 0.2%D112+0.2%D065+0.2%D046+0.25lb/skD029
Surface	Lead	0	13.0	Control Set C /
	Lead	0	12.5	"G" / G+2.0%D079+0.2%D46+0.25 pps D29
	Tail	1,042	14.0	"G" / G+1%D79+0.2%D46+0.25pps D29

Tubeing and Downhole Equipment	O.D.	Length	Depth	Description
	0.000	22.00	22.00	KB
	7.063	0.80	22.80	7 1/16" Woodgroup
	3.063	6,047.37	6,070.17	195 jts. 2 3/8" L80 4.7# Tenaris Columbian tbq.
	3.063	1.10	6,071.27	2 3/8" flag nipple
	3.063	31.55	6,102.82	1 jt. 2 3/8" L80 4.7# Tenaris Columbian tbq.
	3.063	1.10	6,103.92	2 3/8" Seating nipple
	3.063	10.10	6,114.02	2 3/8" L80 pup jt.

Perforations	Stage	Date	From	To	Shots
	Stage 1	08/05/2011	7,100	7,101	3
			7,090	7,091	3
			7,080	7,081	3
			7,070	7,071	3
			7,055	7,056	3
			7,030	7,031	3
			7,019	7,020	3
			6,988	6,989	3
			6,983	6,984	3
			6,977	6,978	3
	Stage 4	08/08/2011	6,511	6,512	3
			6,507	6,508	3
			6,494	6,495	3
			6,437	6,438	3
			6,433	6,434	3
			6,422	6,423	3
			6,408	6,409	3
			6,377	6,378	3
			6,373	6,374	3
			6,367	6,368	3
	Stage 5	08/09/2011	6,325	6,326	3
			6,321	6,322	3
			6,317	6,318	3
			6,287	6,288	3
			6,285	6,286	3
			6,222	6,223	3
			6,211	6,212	3
			6,207	6,208	3
			6,188	6,189	3
			6,185	6,186	3
	Stage 6	08/09/2011	6,155	6,156	3
			6,152	6,153	3
			6,104	6,105	3
			6,096	6,097	3
			6,072	6,073	3
			6,058	6,059	3
			6,053	6,054	3
			6,040	6,041	3
			6,004	6,005	3
			6,001	6,002	3
	Stage 7	08/10/2011	5,938	5,939	3
			5,933	5,934	3
			5,928	5,929	3
			5,913	5,914	3
			5,905	5,906	3
			5,850	5,851	3
			5,822	5,823	3
			5,796	5,797	3
			5,767	5,768	3
			5,750	5,751	3
	Stage 8	08/10/2011	5,706	5,707	3
			5,696	5,697	3
			5,687	5,688	3
	Stage 11	08/12/2011	5,024	5,025	3
			5,005	5,006	3
			4,994	4,995	3
			4,977	4,978	3
			4,958	4,959	3
			4,955	4,956	3
			4,943	4,944	3
			4,923	4,924	3
			4,904	4,905	3
			4,900	4,901	3
	Stage 12	08/15/2011	4,827	4,828	3
			4,817	4,818	3
			4,806	4,807	3
			4,764	4,765	3
			4,755	4,756	3
			4,650	4,651	3
			4,645	4,646	3
			4,584	4,585	3
			4,572	4,573	3
			4,560	4,561	3
	Stage 13	08/15/2011	4,485	4,486	3
			4,473	4,474	3
			4,462	4,463	3
			4,443	4,444	3
			4,426	4,427	3
			4,373	4,374	3
			4,308	4,309	3
			4,290	4,291	3
			4,268	4,269	3

# EnCana Oil & Gas (USA) Inc. N. Piceance Operations

## North Parachute MF 05A-16 H17 696 Perforation Sheet



EnCana Oil & Gas (USA) Inc.

AFE #: 05045186980000  
 Production Casing: 7124' of 4.5" - 11.6# - E-80 - LT&C (HYDRAULIC PACKERS)  
 TOC: 888' , APD TOC is to be lifted 200' above the Williams Fork  
 Casing ID: 4.000 in.  
 W/L PBTD: 7,106 ft

**Completion Notes:**

1. Max Pressure: 6500 PSI / Max Rate: 75 bpm
2. CBL and APD are verified and meet requirements.
3. Perforations: 120PHZ, 0.42" EHD, 3 SPF, 3 1/8" **Bottom switch RF safe**
4. Note: Set bridge plug between each stage
5. Visually verify that gun has fully fired.
6. Any changes to perf schedule or pump schedule (prior to pump time) call Jeffrey Villalobos or Steve Happ.
7. Max Angle is 25.10 @ 2350'. Reach is 860'. Max DLS 5.12 deg/100 ft @ 3905'. Review directional reports in Wellcore.

	Top of Zone	Bottom of Zone	Difference	Top Perf	Bottom Perf	Perforation	Total Holes
Stage 1	6977	7101	124	7100	7101	3 spf	3
				7090	7091	3 spf	3
				7080	7081	3 spf	3
				7070	7071	3 spf	3
Williams Fork				7055	7056	3 spf	3
				7030	7031	3 spf	3
Flush to top perf (bbls) =	108.4			7019	7020	3 spf	3
Rat Hole (ft) =	5			6988	6989	3 spf	3
				6983	6984	3 spf	3
				6977	6978	3 spf	3
Stage 2	6757	6930	173	6929	6930	3 spf	3
				6910	6911	3 spf	3
				6906	6907	3 spf	3
Williams Fork				6867	6868	3 spf	3
				6849	6850	3 spf	3
Flush to top perf =	105.0			6818	6819	3 spf	3
Plug interval (ft) =	47			6796	6797	3 spf	3
				6784	6785	3 spf	3
				6760	6761	3 spf	3
				6757	6758	3 spf	3
Stage 3	6569	6713	144	6712	6713	3 spf	3
				6709	6710	3 spf	3
				6680	6681	3 spf	3
Williams Fork				6666	6667	3 spf	3
				6662	6663	3 spf	3
Flush to top perf =	102.1			6648	6649	3 spf	3
Plug interval (ft) =	44			6607	6608	3 spf	3
				6590	6591	3 spf	3
				6572	6573	3 spf	3
				6569	6570	3 spf	3
Stage 4	6367	6512	145	6511	6512	3 spf	3
				6507	6508	3 spf	3
				6494	6495	3 spf	3
Williams Fork				6437	6438	3 spf	3
				6433	6434	3 spf	3
Flush to top perf =	99.0			6422	6423	3 spf	3
Plug interval (ft) =	57			6408	6409	3 spf	3
				6377	6378	3 spf	3
				6373	6374	3 spf	3
				6367	6368	3 spf	3
Stage 5	6185	6326	141	6325	6326	3 spf	3
				6321	6322	3 spf	3
				6317	6318	3 spf	3
Williams Fork				6287	6288	3 spf	3
				6285	6286	3 spf	3
Flush to top perf =	96.1			6222	6223	3 spf	3
Plug interval (ft) =	41			6211	6212	3 spf	3
				6207	6208	3 spf	3
				6188	6189	3 spf	3
				6185	6186	3 spf	3
Stage 6	6001	6168	167	6167	6168	3 spf	3
				6152	6153	3 spf	3
				6104	6105	3 spf	3
Williams Fork				6096	6097	3 spf	3
				6072	6073	3 spf	3
Flush to top perf =	93.3			6058	6059	3 spf	3
Plug interval (ft) =	17			6053	6054	3 spf	3
				6040	6041	3 spf	3
				6004	6005	3 spf	3
				6001	6002	3 spf	3
Stage 7	5750	5939	189	5938	5939	3 spf	3
				5933	5934	3 spf	3
				5928	5929	3 spf	3
Williams Fork				5913	5914	3 spf	3
				5905	5906	3 spf	3
Flush to top perf =	89.4			5850	5851	3 spf	3
Plug interval (ft) =	62			5822	5823	3 spf	3
				5796	5797	3 spf	3
				5767	5768	3 spf	3
				5750	5751	3 spf	3
Stage 8	5507	5707	200	5706	5707	3 spf	3
				5696	5697	3 spf	3
				5687	5688	3 spf	3
Williams Fork				5677	5678	3 spf	3
				5640	5641	3 spf	3
Flush to top perf =	85.6			5634	5635	3 spf	3
Plug interval (ft) =	43			5620	5621	3 spf	3
				5536	5537	3 spf	3
				5532	5533	3 spf	3
				5507	5508	3 spf	3

Stage 9	5319	5465	148	5464	5465	3	spf	3	
				5455	5456	3	spf	3	
				5446	5447	3	spf	3	
				5430	5431	3	spf	3	
				5417	5418	3	spf	3	
				5405	5406	3	spf	3	
				5369	5370	3	spf	3	
				5330	5331	3	spf	3	
				5325	5326	3	spf	3	
				5319	5320	3	spf	3	
Williams Fork									
Flush to top perf =	82.7								
Plug interval (ft) =	42								
Stage 10	5073	5263	190	5262	5263	3	spf	3	
				5254	5255	3	spf	3	
				5241	5242	3	spf	3	
				5190	5191	3	spf	3	
				5183	5184	3	spf	3	
				5153	5154	3	spf	3	
				5133	5134	3	spf	3	
				5117	5118	3	spf	3	
				5082	5083	3	spf	3	
				5073	5074	3	spf	3	
Williams Fork									
Flush to top perf =	78.8								
Plug interval (ft) =	56								
Stage 11	4900	5025	125	5024	5025	3	spf	3	
				5005	5006	3	spf	3	
				4994	4995	3	spf	3	
				4977	4978	3	spf	3	
				4958	4959	3	spf	3	
				4955	4956	3	spf	3	
				4943	4944	3	spf	3	
				4923	4924	3	spf	3	
				4904	4905	3	spf	3	
				4900	4901	3	spf	3	
Williams Fork									
Flush to top perf =	76.2								
Plug interval (ft) =	48								
Stage 12	4560	4828	268	4827	4828	3	spf	3	
				4817	4818	3	spf	3	
				4806	4807	3	spf	3	
				4764	4765	3	spf	3	
				4755	4756	3	spf	3	
				4650	4651	3	spf	3	
				4645	4646	3	spf	3	
				4584	4585	3	spf	3	
				4572	4573	3	spf	3	
				4560	4561	3	spf	3	
Williams Fork									
Flush to top perf =	70.9								
Plug interval (ft) =	72								
Stage 13	4212	4486	274	4485	4486	3	spf	3	
				4473	4474	3	spf	3	
				4462	4463	3	spf	3	
				4443	4444	3	spf	3	
				4426	4427	3	spf	3	
				4373	4374	3	spf	3	
				4308	4309	3	spf	3	
				4290	4291	3	spf	3	
				4268	4269	3	spf	3	
				4212	4213	3	spf	3	
Williams Fork									
Flush to top perf =	65.5								
Plug interval (ft) =	74								