

Downhole Schematic for DW 8606B-33 P28 496



Project :North Piceance

API # :05045204410000

Surface Location :SESE Sec 28 T4S - R96W 6th PM

Area : Double Willow

County :

BHL : SENW-33-4S-96 W 6th PM

As Of :

GL : 7791.0 ft

KB to GL : 22.0 ft

KB : 7813.0 ft

Set @ 118	500 ft	Casing Details								
		Section	Hole	Casing	Mass	Set At	Length	Thread	Grade	Description
		Conductor	30.000	20	0	118	120			Line Pipe
	1000 ft	Surface	14.750		0	2,354	2	LT&C		Float Shoe
	1500 ft			9.625	36	2,353	42	LT&C	K55	Casing
					0	2,310	2	LT&C		Float Collar
	2000 ft			9.625	36	2,309	125	LT&C	K55	Casing
				9.625	0	2,184	2	LT&C		Parasite sub
	2500 ft			9.625	36	2,183	1,332	LT&C	K55	Casing
				9.625	0	850	2	LT&C		Port Collar
Set @ 2354	3000 ft			9.625	36	848	817	LT&C	K55	Casing
				9.625	0	31	6	ST&C		Mandrel
	3500 ft			9.625	36	25	30	LT&C	K55	Landing jt
		Production	8.750	5.5	11.6	11,780	2	Butt	P-110	Guide Shoe
	4000 ft			4.5	11.6	11,779	20	Butt	P-110	Casing Jt.
				5.5	11.6	11,758	2	Butt	P-110	Float Collar
	4500 ft			4.5	11.6	11,757	1,528	Butt	P-110	Caing Jts.
				4.5	11.6	10,229	20	Butt	P-110	Marker Jt
	5000 ft			4.5	11.6	10,209	2,670	Butt	P-110	Casing Jts
				4.5	11.6	7,538	20	Butt	P-110	Marker Jt
TOC @ 4664	5500 ft			4.5	11.6	7,518	7,521	Butt	P-110	Casing Jts
	6000 ft	Cement Details								
		Section	Sequence		Top	Density	Blend / Additives			
	6500 ft	Surface	Lead		0	9.0	LiteCRETE / See Report			
		Production	Lead		0	10.5	TXI Lead / 75 lb/sk			
	7000 ft						D049+12%D020+1%D079+1%D112+1.2%D013+.250lb/skD029+.500			
							%D046+.600%D182			
	7500 ft		Lead		4,664	12.0	TXI LS Lead /			
							.500%D046+1.0%D013+1.0%D079+75.0lb/skD049+.250lb/skD029+.100%D112			
		Tail		7,863	13.0	Rockies Correct GMS Enc /				
						80lb/skD901+11.0lb/skD035+3.0%D020+.200%D046+.200%D065+.750%D112+35%D178+.400%D201+5.0%D044+.250lb/skD029+.500%D182				
	Conductor	Lead		0	13.5	Control set C / 1/4lb/sk Polliflake				
Stage 12	8000 ft	Perforations Stage 1					Stage 4			
		Date	From	To	Shots	Date	From	To	Shots	
		07/03/2012	11,487	11,488	3	07/13/2012	10,534	10,535	3	
			11,475	11,476	3		10,517	10,518	3	
			11,466	11,467	3		10,493	10,494	3	
			11,457	11,458	3		10,461	10,462	3	
			11,348	11,349	3		10,396	10,397	3	
			11,324	11,325	3		10,388	10,389	3	
			11,313	11,314	3		10,376	10,377	3	
			11,302	11,303	3		10,368	10,369	3	
Stage 11			11,150	11,151	3		10,352	10,353	3	
			11,139	11,140	3		10,336	10,337	3	
	8500 ft	Stage 10				Stage 5				
		Date	From	To	Shots	Date	From	To	Shots	
		07/19/2012	8,892	8,893	3	07/14/2012	10,309	10,310	3	
			8,881	8,882	3		10,297	10,298	3	
			8,849	8,850	3		10,252	10,253	3	
			8,833	8,834	3		10,232	10,233	3	
			8,825	8,826	3		10,208	10,209	3	
			8,798	8,799	3		10,196	10,197	3	
Stage 9			8,739	8,740	3		10,159	10,160	3	
	9000 ft		8,709	8,710	3		10,148	10,149	3	
			8,702	8,703	3		10,090	10,091	3	
			8,691	8,692	3		10,074	10,075	3	
	8800 ft	Stage 11				Stage 6				
		Date	From	To	Shots	Date	From	To	Shots	
		07/19/2012	8,657	8,658	3	07/15/2012	10,044	10,045	3	
			8,595	8,596	3		10,004	10,005	3	
			8,584	8,585	3		9,960	9,961	3	
			8,569	8,570	3		9,939	9,940	3	
Stage 7			8,547	8,548	3		9,924	9,925	3	
	9500 ft		8,517	8,518	3		9,889	9,890	3	
			8,474	8,475	3		9,880	9,881	3	
			8,453	8,454	3		9,871	9,872	3	
			8,412	8,413	3		9,829	9,830	3	
			8,388	8,389	3		9,819	9,820	3	
	8700 ft	Stage 12				Stage 7				
		Date	From	To	Shots	Date	From	To	Shots	
		07/20/2012	8,352	8,353	3	07/16/2012	9,799	9,800	3	
			8,324	8,325	3		9,774	9,775	3	
Stage 5			8,306	8,307	3		9,763	9,764	3	
	10000 ft		8,280	8,281	3		9,733	9,734	3	
			8,257	8,258	3		9,701	9,702	3	
			8,213	8,214	3		9,658	9,659	3	
			8,198	8,199	3		9,605	9,606	3	
			8,184	8,185	3		9,593	9,594	3	
			8,163	8,164	3		9,566	9,567	3	
			8,133	8,134	3		9,553	9,554	3	
	8600 ft	Stage 2				Stage 8				
		Date	From	To	Shots	Date	From	To	Shots	
	07/11/2012	11,097	11,098	3	07/17/2012	9,519	9,520	3		
Stage 3			11,085	11,086	3		9,471	9,472	3	
	10500 ft		11,059	11,060	3		9,433	9,434	3	
			11,011	11,012	3		9,396	9,397	3	
			10,998	10,999	3		9,341	9,342	3	
			10,957	10,958	3		9,327	9,328	3	
			10,926	10,927	3		9,309	9,310	3	
			10,905	10,906	3		9,264	9,265	3	
			10,883	10,884	3		9,222	9,223	3	
			10,859	10,860	3		9,201	9,202	3	
	8500 ft	Stage 3				Stage 9				
	Date	From	To	Shots	Date	From	To	Shots		
	07/12/2012	10,834	10,835	3	07/18/2012	9,125	9,126	3		
Stage 1			10,821	10,822	3		9,116	9,117	3	
			10,755	10,756	3		9,094	9,095	3	
			10,713	10,714	3		9,080	9,081	3	
			10,704	10,705	3		9,061	9,062	3	
			10,665	10,666	3		9,018	9,019	3	
			10,639	10,640	3		8,989	8,990	3	
			10,604	10,605	3		8,958	8,959	3	
			10,582	10,583	3		8,923	8,924	3	
			10,571	10,572	3		8,912	8,913	3	
		11500 ft								

Set @ 11780

PBTD @ 11756

TD @ 11813

Report by Decision Dynamics Technology Ltd. Well ID: 8606B-33 P28 496

September 5, 2012 3:37 PM

**Frac Summary**  
Stage 1 : 11,139 - 11,488, 30 - 0.420" shots, 12191 bbls of Slickwater, 19878 lbs of 100 Sand Report Date: 07/11/2012  
Stage 2 : 10,859 - 11,098, 30 - 0.420" shots, 15224 bbls of Slickwater, 20121 lbs of 100 Sand Report Date: 07/12/2012  
Stage 3 : 10,571 - 10,835, 30 - 0.420" shots, 13068 bbls of Slickwater, 20245 lbs of 100 Sand Report Date: 07/13/2012  
Stage 4 : 10,336 - 10,535, 30 - 0.420" shots, 14120 bbls of Slickwater, 20034 lbs of 100 Sand Report Date: 07/14/2012  
Stage 5 : 10,074 - 10,310, 30 - 0.420" shots, 18777 bbls of Slickwater, 20000 lbs of 100 Sand Report Date: 07/14/2012  
Stage 6 : 9,819 - 10,045, 30 - 0.420" shots, 18242 bbls of Slickwater, 20000 lbs of 100 Sand Report Date: 07/16/2012  
Stage 7 : 9,553 - 9,800, 30 - 0.420" shots, 21099 bbls of Slickwater, 19740 lbs of 100 Sand Report Date: 07/17/2012  
Stage 8 : 9,201 - 9,520, 30 - 0.420" shots, 20107 bbls of Slickwater, 21160 lbs of 100 Sand Report Date: 07/18/2012  
Stage 9 : 8,912 - 9,126, 30 - 0.420" shots, 16456 bbls of Slickwater, 21000 lbs of 100 Sand Report Date: 07/19/2012  
Stage 10 : 8,691 - 8,893, 30 - 0.420" shots, 8605 bbls of Slickwater, 20220 lbs of 100 Sand Report Date: 07/19/2012